

County Borough of West Hartlepool.



# HEALTH REPORT

FOR THE YEAR 1913,

BY

H. E. GAMLEN, M.B., B.S., D.P.H.,

MEDICAL OFFICER OF HEALTH.

---

WEST HARTLEPOOL:

ROBERT MARTIN, Ltd., PRINTERS, TOWER STREET.

1914.



# INDEX.

Abattoirs and Butchers' Shops ...	62, 63	Notification of Births Act ...	58, 59
Bacteriological Examinations ...	61, 62	Offensive Trades ...	64
Births ...	9, 10, 11	Ophthalmia Neonatorum ...	59, 60
Birth and Deaths ...	12	Other Tubercular Diseases ...	49 to 54
Cancer ...	48, 49	Parasitic Mange Order, 1911 ...	65, 66
Causes of Deaths ...	15	Phthisis ...	49 to 54
Common Lodging Houses ...	70	Public Health Matters ...	87
Dairies, Cowsheds and Milkshops ...	69	Population ...	9
Deaths ...	13, 14, 15	Prosecutions ...	74
Diarrhœa ...	35, 36, 37	Privy Middens ...	80, 81
Diphtheria ...	41, 46	Puerperal Fever and Midwives Act 1902 ...	48
Drain Testing ...	81	Rag Flock Act, 1911 ...	81
Erysipelas ...	47	Registered Houses Let in Lodgings...	71
Factory and Workshops Act	81, 82, 83, 84	Report on Examination of School Children ...	88 to 108
Food and Drugs ...	75, 76, 77	Respiratory Diseases ...	61
Fried Fish Shops ...	65	Scarlet Fever ...	38, 39, 40, 42
Health Committee ...	4	Scavenging ...	72, 73
Homework ...	84	Small-pox ...	34, 35
Houses Fumigated ...	71, 72	Still Births ...	11
Housing and Town Planning Acts...	78, 79	Staff of Health Department ...	5
Ice-Cream ...	64, 65	Summary of Sanitary Improvements	67
Infantile Mortality ...	18 to 27	Typhoid Fever ...	46, 47
Infectious Diseases ...	30, 31, 68	Tuberculosis ...	49 to 54
Infectious Diseases (Notification) Act	29	Tuberculosis Order, 1913 ...	54 to 57
Inspections Made ...	68	Vaccination (with Small-pox Report)	34, 35
Measles ...	37	Water Samples ...	68
Meat, &c., Condemned and Destroyed	63	Water Supply ...	8
Memo ...	108	Whooping Cough ...	47
Medical Inspection of School Children ...	88 to 108		
Midwives Act, 1902 ...	48		
Milk and Cream Regulations ...	66		

# HEALTH COMMITTEE.

---

ALDERMAN CLARKSON (Chairman).

„ JOHNSON.

„ WILSON.

COUNCILLOR BARKER.

„ BROWN.

„ COLEMAN.

„ EDGAR.

„ FRYER (Vice-Chairman).

„ MASON.

„ RELTON.

„ RYAN.

„ THOMPSON.

„ THORNTON.

His Worship the Mayor is ex-officio a Member of all Committees.



# STAFF OF THE HEALTH DEPARTMENT.

---

## Medical Officer of Health and School Medical Officer.

H. E. GAMLEN, M.B., B.S., D.P.H.,  
X-Ray Surgeon to Cameron and Hartlepoons Hospitals.

---

## School Medical Inspectors (4).

J. M. WATERS, M.R.C.S. (Eng.), L.S.A. (London).  
E. SEATON COCKELL, M.R.C.S. (Eng.), L.S.A. (London).  
A. G. W. PEARSON, M.B., B.S., D.P.H.  
A. R. McCULLAGH, L.R.C.P., L.S.A. (London).

---

## Sanitary Inspectors (2).

H. V. ROBINSON, C.R.S.I.  
J. T. DURKIN, C.R.S.I.

---

## Nurses (2).

NURSE A. NIXON (Health Visitor).  
NURSE SMITH (School Nurse).

---


## Public Analyst.

CYRIL J. H. STOCK, B.Sc., F.I.C., Darlington.

---

## Borough Veterinary Inspector.

B. HOADLEY, M.R.C.V.S.



Digitized by the Internet Archive  
in 2018 with funding from  
Wellcome Library

<https://archive.org/details/b30260607>

County Borough of



West Hartlepool.

---

# MEDICAL OFFICER'S REPORT

FOR THE YEAR ENDED DECEMBER 31st, 1913.

---

*To the Worshipful The Mayor, the Aldermen and Members  
of the Health and Education Committees.*

Mr. Mayor, Chairman and Gentlemen,

I have the honour to submit to you my Third Annual Report on the Health and Sanitary conditions of your Borough, for the year 1913, together with particulars and reports of the Sanitary Inspectors, of the School Nurse, and Medical Inspectors of School Children.

A most important event in the past year has been the great public interest taken in the problem of Tuberculosis, and the institution of a scheme for combating the disease within the Borough.

With the adoption of the Notification of Births Act, 1909, and the engagement of a Health Visitor, both of which took place during the year, there is every reason to believe that the Borough will be greatly benefitted, and that there will be a big decrease of disease and suffering among infants and a consequent lowering of infantile mortality, particularly in the poorer districts.

A great deal of useful work has been accomplished during the year by your Health Committee, and I have to accord my thanks to the members for their courtesy and the hearty co-operation which they have given me in the administration of the work of my department.

In the same way, the arduous duties imposed upon the Housing Committee have been performed so willingly, as to afford great assistance to me in the work carried out in conjunction with them.

I have pleasure in congratulating the staff of the Health and Education Departments upon their work during the year.

I have the honour to be,

Your obedient servant,

H. E. GAMLEN.

### WATER SUPPLY.

The water supply of West Hartlepool is derived from magnesium limestone areas, which accounts for its extreme hardness. It is very good drinking water.

### APPENDIX.

County Analyst's Office,  
Darlington,

9th May, 1913.

Sample received from West Hartlepool on May 7th, 1913, and marked 496.

Colour and appearance in 2-ft. tube—colourless and clear.  
Odour, when heated to 100 F.—none.

				Grains per Gallon.
Chlorine as Chlorides	...	...	...	8.1200
Nitrogen as Nitrates	...	...	...	.0968
Ammonia	...	...	...	None.
Albuminoid Ammonia	...	...	...	.0008
Oxygen Absorption	...	...	...	.0168
Injurious Metals	...	...	...	None.
Total Solid Matter dried at 220 F....	...	...	...	63.7000
Microscopical Examination—Satisfactory.				

### OBSERVATIONS.

The sample is of good and wholesome quality for drinking purposes.

W. F. KEATING STOCK.

## POPULATION.

The estimated population of the Borough is 65,000 and my returns are calculated upon this.

The number of houses is 13,746, giving an average number of persons per house of 4.7.

There are still many cases of overcrowding, though during the year some of them have been remedied.

Every year improvement takes place in the housing of the working classes, and there is, in consequence, a reduction in sickness and a lower death rate, particularly among the children and infants.

Ward.				Population.
North-East	...	...	...	7,397
Central	...	...	...	9,342
North ...	...	...	...	7,742
West ...	...	...	...	8,643
Park ...	...	...	...	9,687
South-East	...	...	...	7,940
South-West	...	...	...	10,265
Seaton	...	...	...	3,984
				<hr/>
Total			...	65,000

## BIRTHS.

During the year 1913, 1,922 births have been notified in the Borough.

The uncorrected birth rate per thousand of the population is 29.57, compared to 28.27 for 1912. The birth rate for England and Wales during 1913 was 23.9.

Males.	Females.
1,002	920
Legitimate.	Illegitimate.
1,857	65

## WARDS.

North.	West.	Park.	S.-West.	S.-East.	Central.	N.-East.	Seaton.
236	245	174	282	351	296	239	99



The births are distributed as follows:—

Population.	Wards.	Births.	Birth Rate per 1,000 estimated population.
7,742	North	236	30.48
8,643	West	245	28.34
9,687	Park	174	17.96
10,265	South-West	282	27.47
7,940	South-East	351	44.20
9,342	Central	296	31.67
7,397	North-East	239	32.31
3,984	Seaton	99	24.84
<hr/>		<hr/>	
65,000		1,922	

2 children born in Workhouse.

1 born in West Ward, parents belong Durham.

1 born in North Ward, parents belong Norton-on-Tees.

1 born in Central Ward, parents belong Byker.

1 born in South-West Ward, parents belong Whitley Bay.

1 born in Seaton Ward, parents belong Middlesbrough.

1 born in South-East Ward, parents belong Newcastle-on-Tyne.

1 born in South-West Ward, parents belong Easington.

1 born in Park Ward, parents belong Canada.

Since the Notification of Births Act came into active operation 559 births were attended by twenty-three practitioners; 289 births were attended by 10 midwives.

There were 848 births notified under the above Act.

Of the number of notifications received during 1913, 22 of these were sent after the issue of a circular letter, pointing out that notification was required by the Act. Up to the present no one has refused to notify, after receiving a reminder of the obligation to do so.

Of the children visited when five months old by the Health Visitor, it was found that

86 per cent. were still being breast fed.

2 per cent. both breast and bottle.

12 per cent. were entirely weaned.



That over 80 per cent. of infants of the poorer families of West Hartlepool are breast fed at five months of age is very satisfactory, as in such families the mother is sometimes the wage earner, and for that reason has often to wean early. Breast feeding continues until the ninth month in over 75 per cent. of the cases.

In a large number of cases, through the influence of the Health Visitor, mothers have been induced to persevere with breast feeding, when it was their intention to bring up the child on the bottle.

Cards are supplied gratuitously to mothers upon the best methods of infant feeding and the care of infants.

#### STILL BIRTHS.

There were 102 still births notified during 1913, compared with 91 for 1912.

This figure is obtained from the notifications given by medical practitioners, and is checked by the weekly returns from the Superintendent of the Cemetery.

All cases notified by midwives were visited by the Medical Officer of Health, and certificates given by him for their disposal.

1.—TABLE of BIRTHS and DEATHS occurring in the County Borough of West Hartlepool  
for the 7 years ending 1913.

YEAR	Population estimated to Middle of each Year	BIRTHS			TOTAL DEATHS REGISTERED IN THE DISTRICT		TRANSFERABLE DEATHS		NETT DEATHS BELONGING TO THE DISTRICT			
		Un-corrected Number	Nett		Number	Rate	of Non-residents registered in the District	of Residents not registered in the District	Under 1 Year of Age		At all Ages	
			Number	Rate					Number	Rate per 1,000 Nett Births		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1908	71,147		2,138	28.3	933	13.1			234	114	933	13.1
1909	71,147		1,915	26.9	952	13.3			220	103	948	13.3
1910	70,000		1,856	26.5	848	12.1			247	133	947	13.4
1911	63,932	1,852	1,854	29.0	1,007	15.76	29	22	236	127	1,000	15.64
1912	64,095	1,809	1,812	28.27	955	14.89	20	4	186	103	939	14.64
1913	65,000		1,922	29.57	1,039	15.98	9	21	262	136	1,027	15.8

Area of District in Acres (land and inland water)	3,555	Total population at all ages	...	65,000	At Census of 1911.
		Number of inhabited houses	...	13,746	
		Average number of persons per house	...	4.7	

## DEATHS.

1,027 deaths were registered in the Borough during 1913.

Of these 557 were males and 482 were females.

Of the deaths, 9 were not inhabitants of the Borough, and have to be deducted, and 21 deaths of persons belonging to the Borough, but registered elsewhere, have to be added, making a nett total of 1,039 deaths within the Borough.

The death rate for the Borough during 1913 is 15.98 per 1,000, whilst in 1912 it was 14.89.

The death rate for England and Wales for 1913 is 13.4 per 1,000.

The death rate for the various Wards are worked upon a population of 65,000. I have reason to believe that the population is above these figures, and, if so, the death rate will be proportionately lower.

DEATHS AND DEATH RATE FOR THE YEAR IN THE  
VARIOUS WARDS.

Wards.	Population.	Deaths.	Death Rate per 1,000 estimated population.
North	7,742	130	16.92
West	8,643	96	11.10
Park	9,687	93	9.60
South-West	10,265	164	15.97
South-East	7,940	179	22.54
Central	9,342	192	20.55
North-East	7,397	135	18.24
Seaton	3,984	50	12.55
	<hr/> 65,000	<hr/> 1,039	

## DEATHS IN INSTITUTIONS.

Cameron Hospital	...	...	22
Hartlepoons Hospital	...	...	12
Workhouse Hospital	...	...	82
Isolation Hospital	...	...	3
			<hr/>
Total	...	...	119

## INQUESTS.

The Coroner has held 53 inquests within the Borough during the year.

The following is the distribution among the various wards:—

North.	West.	Park.	S. West.	S. East.	Central.	N. East.	Seaton.	Total.
6	6	8	8	10	8	7	—	53

There were 15 deaths registered as uncertified, made up as follows:—

## WARDS.

North.	West.	Park.	S. West	S. East.	Central.	N. East.	Seaton	Total.
4	2	2	—	3	4	—	—	15

If no certificate is given regarding the cause of death, and when no inquest is held, the death is recorded as uncertified. In these cases no medical practitioner has given evidence as to the cause of death. The result is that the cause of death, as found by the jury, is nearly always open to question, and I am strongly of the opinion that the evidence of a medical man should be required at the inquest. If this were done, a medical man would generally be called in before death, by the relatives, in order to avoid the publicity and worry of a possible inquest. There would also be fewer deaths.



III.—Table shewing CAUSES OF and AGES at DEATH for the County Borough of West Hartlepool during the year 1913.

CAUSES OF DEATH	NETT DEATHS AT THE SUBJOINED AGES OF "RESIDENTS" WHETHER OCCURRING WITHIN OR WITHOUT THE DISTRICT.										TOTAL DEATHS WHETHER OF "RESIDENTS" OR "NON- RESIDENTS" IN INSTITUTIONS IN THE DISTRICT.
	All Ages	Under 1 Year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and up- wards.		
1	2	3	4	5	6	7	8	9	10	11	
All causes } Certified ... Uncertified ...	1024	...	...	...	...	...	...	...	...	1024	
	15	...	...	...	...	...	...	...	...	15	
Enteric Fever ... ..	5	...	...	...	...	1	1	3	...	5	
Small-pox ... ..	...	...	...	...	...	...	...	...	...	...	
Measles ... ..	19	4	8	6	1	...	...	...	...	19	
Scarlet Fever ... ..	4	...	...	4	...	...	...	...	...	4	
Whooping Cough ... ..	8	7	1	...	...	...	...	...	...	8	
Diphtheria and Croup ... ..	10	...	4	4	1	...	1	...	...	10	
Influenza ... ..	1	...	...	...	...	...	...	1	...	1	
Erysipelas ... ..	2	1	...	...	...	...	...	1	...	2	
Phthisis (Pulmonary Tuberculosis)	71	...	6	1	6	18	29	11	...	71	
Tuberculosis Meningitis ... ..	25	3	8	8	5	1	...	...	...	25	
Other Tuberculosis Diseases ... ..	33	8	15	1	7	1	1	...	...	33	
Cancer, malignant disease ... ..	56	...	...	...	...	1	9	27	19	56	
Rheumatic Fever ... ..	1	...	...	...	...	1	...	...	...	1	
Meningitis ... ..	14	...	6	5	2	...	...	...	1	14	
Organic Heart Disease ... ..	134	...	...	1	5	3	20	53	52	134	
Bronchitis ... ..	144	47	25	7	2	...	4	19	40	144	
Pneumonia (all forms) ... ..	62	12	8	1	...	3	12	16	10	62	
Other diseases of respiratory organs ... ..	...	...	...	...	...	...	...	...	...	...	
Diarrhoea and Enteritis... ..	46	29	11	5	...	...	...	1	...	46	
Appendicitis and Typhlitis ... ..	1	...	...	...	...	1	...	...	...	1	
Cirrhosis of Liver... ..	...	...	...	...	...	...	...	...	...	...	
Alcoholism ... ..	2	...	...	...	...	...	1	...	1	2	
Nephritis & Bright's Disease ... ..	26	...	...	1	2	2	6	7	8	26	
Puerperal Fever ... ..	1	...	...	...	...	1	...	...	...	1	
Other Accidents and Diseases of Pregnancy and Parturition ... ..	8	1	...	...	...	...	5	2	...	8	
Congenital Debility and Malform- ation, including Premature Birth ... ..	83	83	...	...	...	...	...	...	...	83	
Violent Deaths, excluding Suicide	17	...	...	...	1	3	7	4	2	17	
Suicide ... ..	8	...	...	...	...	...	2	6	...	8	
Other Defined Diseases ... ..	258	67	14	4	9	12	33	47	72	258	
Diseases ill-defined or unknown	...	...	...	...	...	...	...	...	...	...	
Totals ... ..	1039	262	106	48	41	48	131	198	205	1039	





## INFANTILE MORTALITY.

This subject has been freely dealt with in previous reports, and these observations upon the influences of the surroundings of the various wards are as pointed at the present time as they were in former years.

The mortality rate for 1911 was 127 per 1,000 births.

The mortality rate for 1912 was reduced to 103 per 1,000 births.

The mortality rate for 1913 is increased to 136 per 1,000 births, which is the highest rate of infant mortality recorded for the last ten years.

The mortality rate in England and Wales in 1911 was 130 per 1,000 births, in 1912 it was 95 per 1,000 births, and in 1913 it was 109 per 1,000 births.

It is very patent, and has been often remarked by the Health Sub-Committee, through the information which they acquired from their periodical inspections, that in the poorer districts especially, the necessary care and attention is not given to infants.

If all parents made it their business to attend to those matters which are so intimately connected with the welfare of their children, instead of neglecting them, the health of their families would undoubtedly be improved.

The children of the poor also often suffer from improper food, deficiency of clothing, and personal uncleanness.

These latter defects more especially occur in the case of drunken parents.

In addition, dirty dwellings, dirty closed windows, and exclusion of fresh air, are the causes of much sacrifice of infantile life.

At present, to lessen the infant mortality, we are dependent upon several factors:—

1. Health Visitor. Her duties consist of visitation under the Notification of Births Act, 1907, and the Local Government Board's General Order, dealing with the treatment of Tuberculosis. She instructs the mothers in charge of the infants, and distributes cards of instructions on visitation. I would suggest that instructions of infant feeding, domestic cleanliness, and the general care of babies, might with advantage be given to the elder girls in the Schools.

2. Through the agency of midwives, instructions are given in the same way.
3. When the mother is unable to suckle her child, advice is given and a card of instruction is left, showing the best method of feeding for various ages.
4. Strict attention to Municipal cleanliness, particularly to the substitution of ashbins in the place of foul ashpits, and the enforcement of the removal of manure (regulations necessitating the periodical removal of manure), a further advance will be made in the right direction.
5. The removal of insanitary areas and the repair of neglected and insanitary property.
6. The better education and supervision of Midwives.
7. Finally, the greater interest taken in health matters by the Council. In this respect, it is highly creditable to the Members of the Health Committee, that so much more work has been done and so much more interest has been taken in these matters than formerly. The periodical visitations, which they have made, have so increased their knowledge of the conditions, as to be of great benefit to the community.

It must be remembered that, however persistent are the efforts made on behalf of the infant, it counts for very little against the influence which is inherent in the parents. This is particularly true in regard to infantile diarrhœa. If the mother is able and willing to suckle her child, there is much less risk of this happening than if she were unable or unwilling to do so. The reason of this is that milk as supplied by the mother by suckling is never exposed to the contamination of the air; it passes directly from the breast to the stomach, and its composition and temperature is adapted to the requirements of the child. It has no additions or subtractions, and is bacteriologically clean and pure.

It will be seen by the following charts how the infant mortality varies in the different wards. Enquiry shows that of the many causes poverty and riches, sanitary and insanitary conditions, conditions of work, high and low birth rate, all have their influences. But parents living under the same conditions have different results in rearing their infants, which shows that the personal factor is undoubtedly the most important.

The highest mortality occurs in the summer and early autumn, and this is mostly due to contamination of the infant's food by micro-organisms. The storage of food in dirty, dilapidated homes is the cause of a great deal of contamination, and particularly so when there is overcrowding, which is often the case.

#### INFANT MORTALITY IN THE VARIOUS WARDS.

Wards	Deaths	Infant Mortality, per 1000.
North	47	199
West	25	102
Park	25	143
South-West	42	148
South-East	53	151
Central	37	125
North-East	23	96
Seaton	10	101
Total ...	262	

#### CAUSES OF DEATH UNDER 1 YEAR.

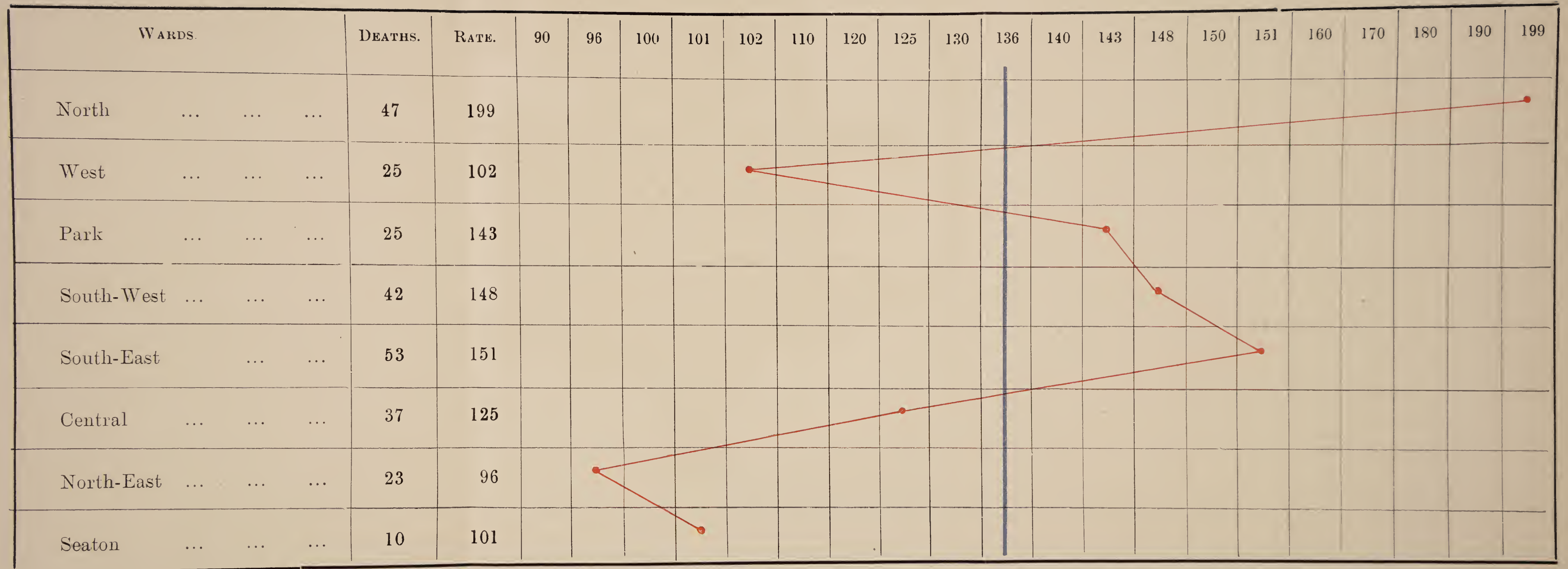
Measles	...	...	...	4
Whooping Cough	...	...	...	7
Diarrhoea and Enteritis	...	...	...	29
Tuberculosis	...	...	...	11
Pneumonia	...	...	...	12
Bronchitis	...	...	...	47
Debility, Premature Birth, Marasmus, and Atelectasis	...	...	...	83
Other causes	...	...	...	69
Total				262



# WARD DISTRIBUTION OF ABOVE.

Wards.	DISEASES.								TOTALS.
	Measles.	Whooping Cough	Diarrhoea and Enteritis	Tuber- colsis	Pneumonia	Bronchitis	Diability, Premature Birth, Maramus and Atelectasis	Other Causes	
North	...	2	5	...	4	10	14	12	47
West	...	...	4	1	2	6	8	4	25
Park	1	...	2	1	...	7	7	7	25
South-West	...	1	9	2	3	2	15	10	42
South-East	3	2	5	4	1	8	16	14	53
Central	...	1	2	3	1	5	10	15	37
North-East	...	1	2	...	1	5	9	5	23
Seaton	...	...	...	...	...	4	4	2	10
Totals ...	4	7	29	11	12	47	83	69	262

## INFANTILE MORTALITY RATE CHART.



The blue line represents the Infantile Mortality Rate per 1,000 births over the entire Borough, and the red the rates for the different Wards.





## IV.—INFANT MORTALITY DURING THE YEAR 1913.

*Nett Deaths from stated causes at various Ages under 1 year of Age.*

CAUSE OF DEATH.	Under 1 week	1-2 weeks	2-3 weeks	3-4 weeks	Total under 1 month.	1-3 months	3-6 months	6-9 months	9-12 months	Total Deaths under 1 year
All causes { Certified. Uncertified.	...	...	...	...	...	...	...	...	...	...
Small-pox ...	...	...	...	...	...	...	...	...	...	...
Chicken-pox ...	...	...	...	...	...	...	...	...	...	...
Measles ...	...	...	...	...	...	...	...	2	2	4
Scarlet Fever ...	...	...	...	...	...	...	...	...	...	...
Whooping Cough ...	...	...	...	...	...	3	...	3	1	7
Diphtheria and Croup ...	...	...	...	...	...	...	...	...	...	...
Erysipelas ...	...	...	...	...	...	1	...	...	...	1
Tuberculous Meningitis ...	...	...	...	...	...	...	1	2	...	3
Abdominal Tuberculosis ...	...	...	...	...	...	...	...	...	...	...
Other Tuberculous Diseases ...	...	...	...	...	...	...	2	1	5	8
Meningitis (not Tuberculous) ...	...	...	...	...	...	...	...	...	...	...
Convulsions ...	4	2	...	...	6	7	6	2	2	23
Laryngitis ...	...	...	...	...	...	...	...	...	...	...
Bronchitis ...	...	...	2	1	3	7	16	10	11	47
Pneumonia (all forms) ...	...	...	...	...	...	2	2	4	4	12
Diarrhœa ...	...	...	...	...	...	2	4	1	4	11
Enteritis ...	...	1	...	...	1	4	1	7	5	18
Gastritis ...	...	...	...	...	...	1	1	...	...	2
Syphilis ...	...	...	...	...	...	1	...	...	...	1
Rickets ...	...	...	...	...	...	...	...	...	...	...
Suffocation, overlying ...	...	...	...	...	...	...	...	1	...	1
Injury at birth ...	1	...	...	...	1	...	...	...	...	1
Atelectasis ...	1	...	...	...	1	...	...	...	...	1
Congenital Malformations ...	13	4	2	1	20	2	2	...	1	25
Premature Birth ...	38	3	5	2	48	6	2	2	...	58
Atrophy, Debility and Marasmus ...	6	4	1	1	12	8	2	2	2	26
Other causes ...	6	...	...	2	8	...	2	3	...	13
Total ...	69	14	10	7	100	44	41	40	37	262

Nett Births in the year: Legitimate, 1857; Illegitimate, 65.

Nett Deaths in the year: Legitimate 262.



It will be noted that the infant mortality rate of 136 is greatly in excess of what it was during 1912, viz., 103.

The excess over 1912 is made up principally in the deaths under three headings:—

	1913		1912
(1) Diarrhœa and Enteritis	29 deaths	...	7 deaths.
(2) Bronchitis	47 deaths	...	24 deaths.

In the case of (1) the excessive hot weather has largely contributed to the deaths. The climatic conditions in 1912, though not appreciated owing to the extremes of cold and wet weather, were the means of saving much infant life.

(2) This compares very unfavourably with that of 1912.

In the North Ward, with its population of 7,742, there were 10 deaths, whilst in the South-East Ward, with its population of 10,265, there were only 2 deaths.

The number of deaths caused by Debility, Premature Birth, Marasmus and Atelectasis (83) is excessive. It is to be expected that there will in the near future be an improvement under this heading.

Many mothers appreciate the valuable services of the Health Visitor, and the midwives now take a greater interest in their work, which is of a higher standard than formerly.



## ANALYSIS OF WARDS, BIRTH, DEATH, AND INFANT MORTALITY RATE.

WARD.	Population.	No. of Births Registered.	Birth Rate.	Nett Deaths	Nett Death Rate.	No. of Deaths under 1 year of age.	Infant Mortality Rate per 1000
North	7,742	236	30.48	130	16.92	47	199
West	8,643	245	28.34	96	11.10	25	102
Park	9,687	174	17.96	93	9.60	25	143
South-West	10,265	282	27.47	164	15.97	42	148
South-East	7,940	351	44.20	179	22.54	53	151
Central	9,342	296	31.67	192	20.55	37	125
North-East	7,397	239	32.31	135	18.24	23	96
Seaton	3,984	99	24.84	50	12.55	10	101

## INFECTIOUS DISEASES (NOTIFICATION) ACT.

Under this Act it was necessary to notify the following diseases, and during the year 1913 812 cases were recorded, of which 219 were removed to the Port Sanitary Hospital.

Diphtheria	...	...	...	69
Erysipelas	...	...	...	35
Scarlet Fever	...	...	...	330
Enteric Fever	...	...	...	7
Puerperal Fever	...	...	...	1
Ophthalmia Neonatorum	...	...	...	7
Pulmonary Tuberculosis	...	...	...	211
Other Tubercular Diseases	...	...	...	152
				<hr/>
Total			...	812

On another page is given the ward distribution and ages of the persons suffering from the various diseases.

In the poorer class of houses where there is limited accommodation, and which are often occupied by large families, the want of adequate isolation and attention is most felt. It is in these cases that the Isolation Hospital is most beneficial, not only to the sufferer but to the community at large, on account of the inmates being more liable to carry infection to their fellows.

All infected houses were visited, fullest particulars taken and recorded, while sanitary defects were pointed out, and printed instructions given. Everything is also thoroughly disinfected at the termination of the illness.

Where the case is not removed to the Hospital, and there is suspicion that the rules for isolation will not be carried out, several visits are made during the course of the illness.

Intimations are made regularly to the Librarian of the names and addresses of persons notified as suffering from infectious diseases, and all books found in infected houses are destroyed, as this is considered a safer method than disinfection and forwarding to the Infectious Fever Hospital, which was done formerly.

The following table shows the number of cases of each disease notified during each month of the year under review.

CASES OF INFECTIOUS DISEASES NOTIFIED MONTHLY.

Month.	Scarlet Fever	Diphtheria	Erysipelas	Enteric and Typhoid Fever	Puerperal Fever	Ophthalmia Neona- torum	Pulmonary Tuber- culosis	Other Tubercular Diseases	Totals
January	15	8	1	...	...	...	9	...	33
February	6	9	6	...	...	...	24	53	98
March	7	5	2	2	...	...	21	24	61
April	8	4	2	...	...	1	19	7	41
May	29	8	1	...	...	...	13	5	56
June	34	5	1	...	...	...	18	10	68
July	43	2	1	...	...	1	15	4	66
August	22	4	3	2	...	1	31	22	85
September	42	5	5	2	...	2	12	8	76
October	41	8	1	...	...	1	12	5	68
November	41	1	7	...	1	...	23	7	80
December	42	10	5	1	...	1	14	7	80
Totals ...	330	69	35	7	1	7	211	152	812



II.—Table shewing CASES of INFECTIOUS DISEASE notified in the County Borough of West Hartlepool during the year 1913.

NOTIFIABLE DISEASE	No. OF CASES NOTIFIED.								TOTAL CASES NOTIFIED IN EACH LOCALITY (WARDS)								TOTAL CASES REMOVED TO HOSPITAL
	At all Ages	At Ages—Years.							1	2	3	4	5	6	7	8	
		Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and upwards	North	West	Park	South- West	South- East	Central	North- East	Seaton	
Small-pox ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera (C), Plague (P) ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membran- ous Croup) ... ..	69	3	20	24	15	6	...	1	11	5	17	18	6	9	..	3	6
Erysipelas ... ..	35	1	...	3	6	10	12	3	6	5	4	8	4	8	...	...	...
Scarlet Fever ... ..	330	2	106	210	7	5	...	...	55	43	22	113	46	27	8	16	209
Typhus Fever ... ..	7	...	...	1	2	...	4	...	1	...	1	2	1	...	1	1	4
Enteric Fever ... ..																	
Relapsing Fever (R), Continued Fever (C) ... ..	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever ... ..	1	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...
Cerebro-spinal Meningitis ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Poliomyelitis ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pulmonary Tuberculosis ...	211	...	2	51	60	78	20	...	36	18	26	43	21	55	7	5	...
Other Forms of Tuberculosis ...	152	9	47	69	18	8	1	...	31	27	29	23	16	18	4	4	...
Ophthalmia Neonatorum ...	7	7	...	...	...	...	...	...	...	5	...	...	1	1	...	...	...
Total ... ..	812	22	175	358	109	107	37	4	140	104	99	207	95	118	20	29	219

Isolation Hospital or Hospitals, Sanatoria, etc.: Port Sanitary Authority Infectious Hospital, Throston.



## SMALL-POX.

No case of this disease occurred during the year.

Like other seaport towns, West Hartlepool is more easily open to the introduction of the disease, and for this reason the greatest vigilance is exercised by the Medical Officer and Officials of the Hartlepool Port Sanitary Authority in inspection of ships arriving at the port.

The advent of Small-pox involves a large amount of work. There is the removal of the patient to the Hospital, the vaccination and re-vaccination of all those who have been exposed to the infection, the destruction of all infected clothes, and the disinfection of the houses. It is also necessary to make daily visits to all who have come within the range of infection, for a period of fourteen to sixteen days, for the purpose of inquiring whether any sickness has arisen. It is further necessary in cases of Chicken Pox to follow up each case notified, in order that no mild case of Small-pox may have been mistaken for Chicken Pox, for the disease is liable to be spread in this way.

Most valuable information is afforded by the medical inspection of school children in the Borough, as to the efficiency of vaccination in various localities.

There is a growing neglect of vaccination, and, on examination, it is found the results in the case of younger children are less satisfactory than those of the older children.

The following table shows that the number of exemptions from vaccination (granted on the so-called ground of conscientious objection), is rapidly increasing, and the facility with which they can be obtained is largely responsible for this unfortunate state of affairs.

In addition to this, a large number of children show scars so faint as to suggest absence of immunity.

It is my duty to warn the inhabitants that at some future date they may have to face a severe epidemic of Small-pox, as year after year there is less protection by vaccination.

From the number of children found by inspection at the Schools to be unvaccinated, and the number of children to whom certificates of exemption have been granted, I estimate that there are 4,000 children unprotected in the Borough.



The number of Declarations of Conscientious Objections to vaccination made during the last five years is as follows:—

1909	...	...	...	149
1910	...	...	...	220
1911	...	...	...	292
1912	...	...	...	322
1913	...	...	...	428
				<hr/>
Total			...	1,411

In order to prepare for the possibility of an outbreak of Small-pox, it has been found necessary to have ready for use Small-pox Pavilions and Isolation Homes, and this great expense could have been to a large extent avoided if efficient vaccination and re-vaccination were compulsory.

### ZYMOTIC DIARRHŒA.

This is one of the diseases most fatal to infants in the Borough.

During the year 1913, there were 46 deaths attributable to this disease, of which 29 occurred under one year of age.

The majority of these cases occurred towards the end of August and during the months of September and October.

The importance of natural feeding as compared with artificial feeding as a preventative of this disease cannot be over estimated.

The deaths amongst children under three months of age fed on artificial food are fifteen times as great as they are amongst an equal number of infants fed upon breast milk, e.g., investigation has shown that out of 1,000 infants under three months naturally fed upon breast milk alone, 20 die of Zymotic Diarrhœa; but of the same number of infants at the same age which are artificially fed, then, instead of only 20 dying, as many as 300 will die from this cause.

Zymotic Diarrhœa prevention is partly dependent on the efficiency of scavenging and general cleanliness in the immediate neighbourhood of dwelling houses, as well as in the houses themselves.

All offensive accumulations should be removed, and where manure has to be collected, weekly removal is absolutely necessary. These are the breeding places of the common house fly. Eggs deposited in manure in warm weather produce in seven to ten days adult insect pests, which are a dangerous source of food contamination to the neighbouring houses.

Road cleanliness is of first importance on the question of summer diarrhoea. Collections of dust are sources of contamination of the food supply, and especially of meat, fruit, etc., exposed in shop windows and on public stalls and wheel-barrows.

All insanitary conditions, including badly and unpaved back yards, are being dealt with as far as possible by the Sanitary Inspectors on their house to house visitation. Domestic overcrowding is dealt with vigorously by the Inspectors, and a great amount of time and energy has been expended upon houses-let-in-lodgings, but until more stringent regulations are made very little headway can possibly take place.

During the years 1912 and 1913, I have made personal enquiries into the causes of children dying, and found that the majority under twelve months of life were artificially fed. In some cases special attention by periodical visits to the worst districts were made during the summer months. Constant visitation two or three times weekly would have a very beneficial result on the infantile mortality, but with the present limited staff it is impossible to follow up the work as it ought to be done.

Zymotic Enteritis is purely a filth disease, and is associated with overcrowding, want of ventilation, want of light and cleanliness, foul emanations from any filth, and, in short, all conditions which contribute to the contamination or excretal pollution of food and milk.

This often occurs during the process of milking and handling of milk, or when it is stored up in small dirty, overcrowded, ill-kept houses. The conditions most favourable for this last mode of infection are in and around houses where the yards are unpaved or badly paved and drained, and particularly where there are accumulations of night soil, which allow the surroundings to be polluted with fæcal and decaying organic matter. In such localities intestinal and sewage bacteria abound, and they only wait until the soil temperature, moisture, etc.,



are favourable for their multiplication. Dissemination occurs during the hot and dry months of summer, when they are carried to persons, food and especially milk.

### MEASLES.

There were 19 deaths notified as due to Measles during 1913, compared with 63 in 1912 and 52 in 1911.

The Ward distribution is as follows:—

North	West.	Park.	S.-West.	S.-East.	Central.	N.-East.	Seaton.	Total.
1	—	1	5	8	4	—	—	19

Towards the latter part of 1912, Measles was very prevalent, many deaths occurring. At the beginning of this year the disease had hardly subsided. In January 10 deaths were recorded, but since then only 9 have taken place.

This disease is associated with Bronchitis and Pneumonia, and thus many deaths recorded as due to these complaints are really due to Measles. It is practically impossible to isolate Measles in the majority of homes. Epidemics generally occur regularly every second or third year, and we find a large number of susceptible children, who early fall victims, under conditions where there is free personal communication. The fatal cases occur mainly amongst infants below two years of age. Attacks at this period are more dangerous to life than if they were postponed to a later age. Again, attacks are particularly fatal in the winter months.

The belief that children must sooner or later have Measles is still prevalent amongst many mothers, and on this account it frequently happens that no precautions are taken in regard to isolating the cases of this illness from the other children, the idea being that the sooner all the children have it the better.

The reverse, however, is the case, for if the exposure to Measles comes later in life, there is less liability to an attack, and moreover the disease is less likely to be fatal.

This disease is more destructive of life than Scarlet Fever, Diphtheria and Typhoid Fever together.

## SCARLET FEVER.

During the year 1913, 330 cases of Scarlet Fever were notified, as compared with 151 for 1912 and 118 for 1911.

During the year 1912, there were five fatal cases, giving a fatality rate of 3.3 per cent., whilst in 1913 there were four fatal cases, the fatality rate being 1.3 per cent.

## WARD INSPECTION.

West	North	Park	S.-West	S.-East	Central	N.-East	Seaton	Total
43	55	22	113	46	27	8	16	330

The policy of former years has been to remove to the Port Sanitary Hospital only those cases where it was not possible to isolate the patient at home. This I have found to be open to serious objection in some of the wards, and I have had removed every possible case, not only where it was not possible to isolate them, but where the promise to isolate was not likely to be kept. Within a few days after the visit from the Sanitary Inspector, the patient invariably comes in contact with the other members of the family, and in the later stages of the disease it is a common practice, if re-inspection is not expected, to find the patient freely mixing with the other inmates of the house.

It has been necessary in several instances to draw the Authority's attention to carelessness in isolation, and, acting upon my suggestions, these people were given warnings, which they are not likely to disregard in future.

The public are gradually appreciating the value of isolation, and only in exceptional cases is there any difficulty in persuading removal to the Isolation Hospital.

The percentage of removals is 63 for 1913, compared with 35 for 1912, and 22 for 1911.

In the past the number of deaths resulting from Scarlet Fever reached very high proportions, but now that Hospital accommodation is encouraged for the isolation of patients, and better administrative methods, aided by legislation, are adopted, there has been a large decline in the number of cases which prove fatal.

Leaflets containing advice to parents and to the school teachers are freely distributed in affected districts.

There is a great risk of Scarlet Fever being disseminated in the schools owing to the children coming into contact with each other for lengthened periods. It is generally noticeable that immediately the holidays have begun the number of children attacked is appreciably decreased, and this diminution continues until the schools have re-assembled. A list has been made of the number of notifications received weekly, and from these figures a chart has been prepared, which in this outbreak, however, does not show that school attendance had any marked influence.

Other influences are the congregation of children playing together in restricted areas, and contact at picture halls. The teachers have been extremely observant in detecting ailing children, and in several cases where their suspicions have been aroused they have excluded children who within a short time have developed Scarlet Fever.

Two special reports on this disease have been made during 1913.



NUMBER OF CASES OF SCARLET FEVER NOTIFIED WEEKLY  
DURING THE YEAR 1913.

Week ending	No of Cases	Week ending	No. of Cases
January 1st to 4th ...	4	July 12th ... ..	13
January 11th ... ..	1	July 19th ... ..	10
January 18th ... ..	7	July 26th ... ..	12
January 25th ... ..	2	August 2nd ... ..	2
February 1st ... ..	1	August 9th ... ..	4
February 8th ... ..	—	August 16th ... ..	5
February 15th ... ..	2	August 23rd ... ..	5
February 22nd ... ..	2	August 30th ... ..	6
March 1st ... ..	1	September 6th ... ..	12
March 8th ... ..	2	September 13th ... ..	7
March 15th ... ..	1	September 20th ... ..	8
March 22nd ... ..	2	September 27th ... ..	11
March 29th ... ..	2	October 4th ... ..	11
April 5th ... ..	—	October 11th ... ..	11
April 12th ... ..	2	October 18th ... ..	8
April 19th ... ..	2	October 25th ... ..	10
April 26th ... ..	2	November 1st ... ..	7
May 3rd ... ..	3	November 8th ... ..	10
May 10th ... ..	2	November 15th ... ..	16
May 17th ... ..	6	November 22nd ... ..	8
May 24th ... ..	5	November 29th ... ..	6
May 31st ... ..	14	December 6th ... ..	8
June 7th ... ..	9	December 13th ... ..	8
June 14th ... ..	14	December 20th ... ..	11
June 21st ... ..	2	December 27th ... ..	7
June 28th ... ..	9	Dec. 28th to Dec. 31st ...	9
July 5th ... ..	8		—
		Total ...	330

Midsummer Holidays

Easter Holidays

Xmas Holidays



## DIPHTHERIA.

Number of Cases notified ...	...	69
Number of Deaths ...	...	10
Case Fatality per cent. ...	...	13
Number of Cases removed to Hospital		6
Percentage of Cases removed ...		8.5

During the year 1911 there were 66 cases, of which 15 were fatal, the fatality rate being 23.

During the year 1912 there were 92 cases, of which 17 were fatal, the fatality rate being 18.5.

The fatality rate of 13, though lower than that of 1912 and 1911, is excessively high, and indicates the serious nature of the infection. On enquiry I find that the majority of the deaths were inoculated with anti-toxin in the later stages of the disease. An earlier inoculation would no doubt have been the means of saving some lives.

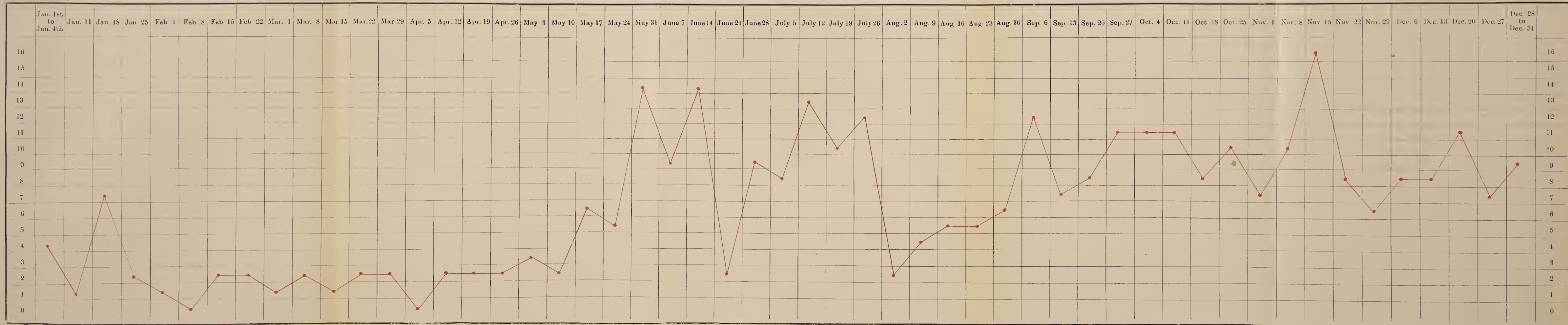
## METHODS ADOPTED FOR PREVENTING THE SPREAD OF THE DISEASE.

On notification all cases are promptly visited, and removal advised to the Infectious Disease Hospital. Whenever isolation is impracticable, or nursing is not satisfactory, removal is compulsory. The Borough provides gratuitous means for carrying out promptly bacteriological examinations, and there is also a gratuitous supply of anti-toxin at any time day or night for medical men who require it for treatment, or for the prevention of the spreading of the disease amongst the poorer inhabitants of the Borough. Diphtheria is often spread by carriers, and examination and treatment of these cases limits the spreading of the disease. Medical men for this reason are generally prepared to examine all contacts, and the safest policy for the Borough would be to extend the gratuitous anti-toxin supply and culture examinations to all classes of patients, regardless of their social position.

The limitation of these supplies is false economy, as by their freer use disease is often suppressed.

CHART SHOWING THE NUMBER OF CASES OF SCARLET FEVER NOTIFIED WEEKLY DURING THE YEAR 1913.

Week Ending





In all cases disinfection is thoroughly carried out. The Education Authority are kept regularly informed of the occurrence of cases. Information is given in all cases of the date on which patients and other inmates of the house may return to school. Leaflets are freely distributed.

The results of sanitary examinations justify me in saying that there is close relationship between Diphtheria and the fouling of the superficial layers of the soil in the neighbourhood of dwellings, owing to the absence of an impervious covering.

The cultivation of the soil is the only means by which cleanliness and the avoidance of dangerous diseases, such as Diphtheria, can be brought about.

In crowded localities where children play, or in the vicinity of, the conveniences, the only means by which the collection of polluted matter can be avoided is by having the whole surface imperviously constructed of flagging or concrete, and properly channelled and drained.

69 cases of Diphtheria notified in 59 streets, and these cases occurred in 61 houses.

The examination of these premises for defects and insanitary conditions:—

		Water Closets.		Privies.		Total.
(1) No defects ...	...	48	...	2	...	50
(2) Slight defects	...	4	...	2	...	6
(3) Serious defects	...	2	...	11	...	13

Of the 69 cases of Diphtheria notified, 26 had discharges examined, a positive result being found in 17, and a negative result in 9 cases.

Serum was used fairly frequently, 96 vials were supplied gratuitously.

### TYPHOID FEVER.

There were 7 cases of Typhoid Fever notified during 1913, compared with 15 for 1912, and 17 for 1911. Two deaths resulted, one in the South-West and the other in the North Ward. Two cases occurred in the South-West Ward, and one each in the North, Park, South-East, and Seaton Wards.

Three cases were treated at the Port Sanitary Hospital.



In two cases we obtained a history of having eaten uncooked mussels prior to the onset of the disease.

The cause of the local decrease in Typhoid Fever is undoubtedly due to a great extent to the improved housing conditions of the poor. The principal improvement effected was in the disposal of excrement. But the greater care exercised by the Sanitary Officials in following up the cases, the better supervision of food, and the earlier removal of fly breeding refuse, have also played their part in reducing the incidence of the disease.

In suspected cases it would be advisable to give the medical practitioners the opportunity of having free examinations of the blood by Widal's agglutination test. If this were done cases would be often diagnosed at an earlier stage than at present. This is the usual practice in most up-to-date towns.

#### ERYSIPELAS.

During the year, 35 cases of Erysipelas were notified, and no deaths were returned.

In houses where cases were notified, various insanitary conditions were sometimes found, and these were remedied.

#### WHOOPING COUGH.

Whooping Cough was responsible for 8 deaths during the year, as compared with 13 in 1912 and 24 occurring during 1911.

Wards distribution of deaths:—

West	North	Park	S.-West	S.-East	Central	N.-East	Seaton	Total
0	1	0	1	4	1	1	0	8

Seven of these deaths occurred under one year of age.

This complaint shows a decrease since 1911 and 1912, and it is one of the most distressing and painful causes of death in very early life. The mortality of this disease is largely due, as in the case of Measles, to the want of care exercised during the course of the illness, in avoiding exposure to cold. A certain number of deaths, which are certified to be primarily due to diseases of the lungs are found, on enquiry, to have originated in Whooping Cough. I have in my practice traced a certain number of cases of Tuberculosis of the Lungs, which has probably originated in Whooping Cough.

## PUERPERAL FEVER AND MIDWIVES ACT, 1902.

Only one case of Puerperal Fever was notified during the year.

During 1912, there were two cases notified and one death.

There is a distinct tendency towards lessening of the incidence and mortality from this disease since the passing of the Midwives' Act of 1902.

35 per cent. of all births occurring in the Borough during the year were attended by midwives. It is very important that some reasonable amount of training should be insisted upon, so that this work should not be left as it formerly was, for anyone to undertake with or without training or knowledge.

Since maternity benefits are only paid where the case is attended by a medical practitioner or a qualified midwife, this has been partly the means of doing away with nearly all unqualified practice.

During the year, two midwives were warned by the Local Authority for neglecting the rules laid down by the Midwives' Board.

Ten midwives notified their intention of practising in the Borough during 1913.

The actual supervision of the midwives is undertaken by the Medical Officer of Health, and, in following up his duties in this respect, he has made 37 visits to the places of residence of the midwives, and investigated their usual mode of practice, their register of cases, bag of appliances, and enquired into cases of illness which have occurred in their practice. In most of the cases the bags and appliances were kept in a cleanly state, and modern methods observed.

## CANCER.

The number of deaths registered from Cancer during the year was 56, as compared with 62 for 1912.

## WARDS.

	North.	West.	Park.	S. West.	S. East.	Central	N. East.	Seaton.	Total.
1912 ...	8	12	4	13	8	9	8	—	62
1913 ...	4	9	6	9	8	8	10	2	56

There has been for the last few years a universal general increase in the death rate from Cancer, but this increase is really not alarming, as it does not show that we are more prone to the disease than formerly. The death rate for Tuberculosis and many other diseases has been gradually decreasing, and thus a large proportion of the population live to be affected by those diseases which prevail in mid life and old age, and probably it must rather be taken as an indication of success in combating the earlier causes of death. The problem of the discovery of the cause and the successful treatment of Cancer has not yet been solved.

### TUBERCULOSIS.

The development of the administrative machinery for the prevention of Tuberculosis is rapidly advancing. The first serious attempt towards attacking this complaint was in 1908, when regulations were issued which provided for the notification of Pulmonary Tuberculosis in the case of inmates of Poor Law institutions, and of persons under the care of Poor Law officers. In March, 1911, a further progressive step was taken, and all cases in hospitals, or out-patients of hospitals, had to be notified. Later in the year, in November, 1911, further regulations were made, which came into operation early in 1912, by which all cases in the practice of medical practitioners had to be notified. These last steps afford an exceptional opportunity of investigating the conditions under which a person has been living, and of collecting information as to the prevalence of the various manifestations of the disease.

These investigations have in the first place proved that Tuberculosis is in many instances a communicative, preventable and curable disease, and have brought before the public notice that many factors are conducive to the spreading of the disease, such as overcrowding, lack of ample through ventilation, dampness of dwellings, and, in short, any circumstances likely to injure the health of the inhabitants.

Under the National Insurance Act, 1911, sanatorium benefit came into operation on July 15th, 1912, and the Local Government Board recommended that for the prevention, detection and treatment of Tuberculosis, existing methods should be supplemented by the establishment and equipment of two units, linked up with the health work now carried on.

The first consists of the Tuberculosis Dispensary, and the second, institutions in which in-patient treatment is given.



The Tuberculosis Dispensary should be utilized as:—

1. A receiving house and centre of diagnosis.
2. The centre of selection of cases for sanatorium, hospital, or home treatment.
3. The centre for curative treatment, administration of tuberculin, etc.
4. The centre for examination of contacts.
5. The centre for after care.
6. An information bureau and educational centre.

The treatment in sanatorium will, as far as possible, be confined to those cases in which there is a reasonable prospect of cure, or at least a return of working capacity, and will afford a means of instructing the patient in the precautions which should be observed, both for his own health and that of his family and associates.

The Local Government Board require that the organization of schemes must be undertaken as part of the Public Health administration of the area to which they relate, and that the Medical Officer of Health should be Chief Executive and Organizing Officer. At the same time, they make it the duty of the Medical Officer of Health, upon receiving notification of a case of Tuberculosis (either he or an officer acting under his instructions), to make such enquiries and take such steps as may appear to be necessary or desirable for preventing the spreading of infection, or for removing conditions favourable to infection.

This will necessarily include investigations into sources of infection, search for contacts, and enquiry into housing conditions.

#### TUBERCULOSIS SCHEME FOR THE BOROUGH.

The Health Committee at several meetings have carefully considered the question of schemes for the control of Tuberculosis in the Borough. The Medical Officer of Health prepared several special reports upon the subject. Finally, the Health Committee decided not to recommend the Authority to adopt Sanatorium or Hospital Schemes, in view of the heavy expenditure likely to be incurred, as the amounts which would be received from the Insurance Committee funds and from the National Exchequer would be totally inadequate.



In 1912, conferences were held at Durham in conjunction with representatives of the County Council and the County Boroughs, and during this year the County Boroughs held two conferences at Sunderland.

In December of this year it was decided to adopt the Tuberculosis Dispensary Unit, whereby all persons within the Borough, whether insured or uninsured, may have the advantage and advice of one of the Tuberculosis Officers of the administrative County of Durham.

During the year 1913 there were registered 71 deaths due to Pulmonary Tuberculosis, compared with 69, the number notified during 1912.

These figures give for the year 1913 a death rate of 1.09 for Phthisis, and for other Tubercular diseases .91.

#### AGE AND WARD DISTRIBUTION DURING THE YEAR 1913 FOR PHTHISIS.

Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 & upwards	
—	7	6	18	29	11	—	
North	West.	Park.	S.-West.	S.-East.	Central.	N.-East.	Seaton.
8	3	4	19	11	20	4	2

#### AGE AND WARD DISTRIBUTION DURING THE YEAR 1913 FOR OTHER TUBERCULAR DISEASES.

Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 & upwards	
11	32	12	2	1	—	—	
North	West.	Park.	S.-West.	S.-East.	Central.	N.-East.	Seaton.
11	5	1	11	12	13	4	1

#### NOTIFICATION OF PULMONARY TUBERCULOSIS.

The total number of notifications of all cases of Pulmonary Tuberculosis received during the year was 211. Of these, 196 were new cases. In a certain number of cases more than one notification was received.

1. Notifications from Medical Practitioners of cases in private practice, 159.
2. Notifications from cases in Poor Law practice, 4.
3. Notifications from Poor Law Officers, 5.
4. Notifications from Medical Officers in General Hospitals, 34.
5. Notifications from School Medical Inspectors, 9.

The majority of cases of Phthisis notified are advanced cases, as of the 192 sputums examined for Tubercle Bacilli. I have obtained a positive result in 91 of these, or over 47 per cent. The Medical Officer of Health has acted during the year as temporary adviser to the Insurance Committee, and dealt with applications for sanatorium benefit, pending the establishment of a complete scheme for the administration of sanatorium benefit. Under the National Health Insurance Act it is necessary for Insurance Committees to make arrangements for the treatment of persons suffering from Tuberculosis, which will necessarily be of a provisional character.

There is no doubt that large numbers of cases of Phthisis showing clinical signs are not notified until the case is so advanced as to seriously diminish any hope of recovery.

Large sums of money are being expended in providing institutions for the treatment of cases of Pulmonary Tuberculosis, but their value will be greatly discounted if patients delay in seeking medical advice until the disease is advanced, or if medical practitioners fail to report the disease in its early stages, and in doubtful cases do not utilize the expert advice which is always available, as regards the diagnosis and treatment of the disease.

#### Administration of Sanatorium Benefit:—

- (1) Insured persons in receipt of sanatorium benefit, six months ended December 31st, 1912: 23 males and 8 females—total 31.
- (2) Insured persons in receipt of sanatorium benefit for the year ended December 31st, 1913: 37 males and 12 females—total 49.
- (3) Total number of insured persons who have received sanatorium benefit, July 12th, 1912, to December 31st, 1913: at home (domiciliary treatment): 80.

In sanatoria: 12 males and 9 females—total 21.

At home (domiciliary treatment): 60 males and 20 females—total 80.

The work done in connection with cases of Pulmonary Tuberculosis is as follows:—The Health Visitor visits whenever it appears desirable. Advice is given verbally and by circulars, which lay down rules and precautions to be taken to limit the spread of infection. During the year, 1,042 visits were made. Some of these visits were to persons who had returned from the sanatoria, but most of them were to those on the waiting list, and to those cases where the services of a nurse were particularly applicable. Whenever deaths have occurred, the homes are visited a few days afterwards by the Disinfection Officer, who disinfects the clothing and bedding and premises. Subsequently the Inspectors collect information for statistical purposes. The Tuberculosis Regulations of 1911, imposed obligation on Local Authorities to make such inquiries, or take such steps as may appear necessary or desirable for preventing the spread of infection, and for removing conditions favourable to infection. This work is very exacting, and until further provision is made it cannot be efficiently done, as the present staff is totally inadequate to cope with the increasing duties.

Each case should be visited regularly for investigation purposes. Several visits are sometimes necessary for each case. After this routine, visitation is required to ensure that the instructions on hygiene, living, disinfection, etc., are being carried out.

From August 1st to end of the year the Health Visitor paid 396 visits to cases of Tuberculosis, of which number 64 were primary and 332 secondary visits.

From January 1st to July 31st, 1913, the present Health Visitor was Tuberculosis Nurse under the Insurance Committee, and during this period she made 593 visits. In the same period the Sanitary Inspectors visited 53 cases, making a total for the year of 1,042 visits.

## RESULTS OF INVESTIGATION.

In the majority of cases the Nurse and Sanitary Inspectors are welcomed during their visitations. The principal exceptions being where the patients are inmates of lodging houses. It is quite a common



thing to find several members of one family suffering from the complaint. Many cases are found in houses dirty and badly ventilated. In others, though the house is clean, spacious ventilation is not taken advantage of. In a large number of cases the bed is shared with another member of the family, and it is an exception in the poorer localities to find the consumptive sleeping in a bedroom alone. Many cases move from place to place and change their names, and in this way sometimes the case is lost trace of. There is always some improvement in the home conditions amongst the poor after visiting has taken place by the Health Visitor.

The Medical Officer of Health has had during the year a large number of cases of Tuberculosis under treatment, and the majority of such cases, when suitable, have received tuberculin injections, etc., and the results of treatment have been very encouraging, particularly in children, where the seeds of Tuberculosis mischief is limited. I am quite aware that tuberculin is not yet universally thought to be the best means of a cure. Sceptics point to the results of unfavourable treatment, forgetting, however, that where one case is not benefitted a dozen are. Prevention, however, is better than cure, and in no disease does this adage apply more than to Phthisis. Sanatoria, dispensaries, tuberculin, drugs, etc., are insignificant agencies, as compared with well lighted, properly ventilated and clean houses. Treatment is an uphill task; prevention obviates the necessity for it.

#### TUBERCULOSIS ORDER, 1913.

This Order came into active operation on the 1st of May of last year, and a Committee considered a report upon the subject by the Medical Officer of Health, in June of last year, and your Veterinary Inspector (Mr. B. Hoadley) had duties allocated to him under this Order.

This Order strengthens the hands of Local Authorities in their efforts to deal with Tuberculosis. The fact that the Bovine Tuberculosis is not infrequently the cause of Human Tuberculosis, especially in children, is now established beyond all doubt, and the sale of Tuberculosis milk must be stopped before any serious attempt can be made to grapple with the problem of non-pulmonary Tuberculosis.



The Order provides for the notification under penalty of any cow which has a chronic disease of the udder, or which appears to be suffering from Tuberculosis with emaciation. The animal is then examined by the Veterinary Inspector of the Local Authority, and if it is decided that the animal is tuberculous, it is then ordered to be slaughtered, and compensation paid to the owner on the following scale:—

1. If a post mortem examination does not show that the animal was suffering from Tuberculosis, the Local Authority shall pay to the owner thereof a sum equal to the value of the animal as agreed, and a further sum of 20/-.
2. If the animal was suffering from Tuberculosis (not being Advanced Tuberculosis), the Local Authority shall pay a sum equal to three-fourths of the animal as agreed.
3. If the animal was suffering from Advanced Tuberculosis, the Local Authority shall pay a sum equal to one-fourth of the animal as agreed, or the sum of 30/-, whichever sum is the greater.

Advanced Tuberculosis is defined as follows:—

- (a) When there is Miliary Tuberculosis of both lungs.
- (b) When Tuberculous lesions are present on the pleura and peritoneum.
- (c) When Tuberculous lesions are present in the muscular system or in the lymphatic glands, embedded in or between the muscles, or,
- (d) When the carcass is emaciated and Tuberculous lesions are present.

The above is the degree of Tuberculosis, which, in the opinion of the Royal Commission, justifies the seizure by Meat Inspectors of the entire carcass and all the organs thereof. In other cases of Tuberculosis, the carcass, if otherwise healthy, need not, in the opinion of the Commissioners, be condemned under the Public Health Acts, except the portions containing Tuberculous lesions.

One half of the net sum required for compensation during the first five years of the working of the Order will be provided by His Majesty's Treasury.

The third Interim Report of the last Commission on Tuberculosis contains the following information:—

“ We have found that even in the case of cows, with slight Tuberculous lesions, Tubercle Bacilli in small numbers are discharged in the fæces; whilst, as regards cows, clinically Tuberculous, our experiments show that the fæces contain large numbers of living and virulent tubercle bacilli.”

These facts are additional reasons why it is essential that scrupulous cleanliness in the shipon must be insisted upon, and every effort ought to be made, by frequent visitation, to secure in shipons that attention to cleanliness which is at present rarely found.

In the event of any herd being proved to supply infected milk, it will be necessary to give each bovine animal individual attention, and examine a sample of milk from each cow, and, if necessary, have the animal tested with tuberculin by your Veterinary Inspector.

In the event of the contaminated supply of milk coming from outside the district, the same procedure will have to be gone through, but in these cases it will be necessary to obtain the consent of the owner of the herd for the inspection; this difficulty could be got over after notification to the owner that the supply of milk was infected, and the sale of this milk was prohibited in the district.

In November last, the Inspector and other officials visited various cow-byres in the Borough, and inspected all the cows supplying milk. From the results of investigation by tuberculin and milk examination, it was found necessary to slaughter two cows. In both instances the animals were slaughtered at the abattoir, and showed well-marked indications of tubercular mischief. A third animal under suspicion was slaughtered at a knackers yard, and, after treatment, was used for dog meat.

There is supplied to the Borough daily (approximately) 1,748 gallons of milk, made up as follows:—

6 farmers, with 48 milking cows in the Borough, supply 85 gallons.

28 farmers, with 568 milking cows outside the Borough, supply 1,125 gallons.

The Co-operative Dairy supply 368 gallons.

The Cleveland Dairy supply 170 gallons.

It is impossible to get statistics of the number of farmers and cows supplying the two last mentioned dairies, but the milk sold by them is obtained from outside the Borough.

The above figures were obtained during May of last year.

Local legislation, relating to the purity of the milk supplied the Borough, is much needed. During the last year, I have examined a large number of samples of milk, and have found, after centrifuging, that the sediment contains adventitious material, such as cow dung and hairs, which indicated filth contamination.

On microscopical examination I have also found tubercle bacilli and colon bacilli.

On several occasions I have roughly sorted samples of milk from all the farms, and found by the Gerbers' method of fat measurements that there was always over 3 per cent of fat extracted. One farmer's supply always shows milk with over 4.5 per cent. of fat. In the same way, I have often examined milk supplied by purveyors, and, from results found, we have been greatly assisted in the sampling of milks for the Borough Analyst.

The cowsheds in the Borough have been periodically examined, and there is an improvement to be recorded in most of the sheds, but, with regard to the others, there is much to be desired. In one case in particular the housing of the herd was in a bad condition, and notice to abate some nuisance was necessary at each inspection.

With regard to the condition of the cattle in the Borough, none of them are groomed, their hind quarters and tails are caked with dried dung and mud, the udders are not cleansed, nor are the milkers provided with hot water, soap, towels or overalls. Under these conditions it is impossible to obtain clean milk.

To carry out the Order, the Local Authority has provided bacteriological examination of all suspected milk, and, where necessary, it has been biologically examined.

The Sanitary Inspectors use vigilance in bringing to the notice of the Veterinary Inspector any suspicious cases which come within the provisions of the Order.



## NOTIFICATION OF BIRTHS ACT, 1907.

This Act was adopted by the Council in December of 1912, and came into operation in March, 1913.

The object of this Act is to enable Health Authorities to give help and advice in suitable cases where a birth has occurred, at a time when it is most necessary, that is to say, within the first few days of the child's life.

In the case of every child born in the Borough, it is the duty of the father of the child, or of any person in attendance upon the mother at the time of, or within six hours after, the birth, to give notice, in writing, of the birth to the Medical Officer of Health, within thirty-six hours after the child is born.

Formerly, six or seven weeks elapsed before information could reach the Health Department, so that in some instances the child had died before any help could have been given from the Health Department, even if there had been provision for such.

Formerly, only the number of births occurring weekly (with the sex) came to hand, and there was great difficulty in recording the work done by medical practitioners, midwives, and unregistered women. To work this Act, the services of a Health Visitor was obtained.

The administration of the Act commenced on August 1st, therefore this report only deals with figures from this date to December 31st, 1913.

During this period, 559 births were notified by twenty-three practitioners, and 289 births by ten midwives; also 829 visits were paid to 315 cases by the Health Visitor.

It is somewhat difficult to determine the best method of working, especially as the Health Visitor has also to attend to Tuberculosis cases. At first the nurse was in attendance at all cases in poor localities. Where a medical practitioner had attended at birth, her visits commenced sixteen days afterwards. Where, however, a midwife was in attendance, she visited all cases within a few days. It soon became evident that she could not deal with all the work required, and it had to be curtailed.



The Health Visitor, on calling, collects certain information with regard to the case, gives advice where necessary, and leaves a card of instructions as to infant feeding and management. It soon became evident that, to attend to this work, it required the whole time service of the Health Visitor.

The proportion of breast fed infants to bottle fed infants is 6 to 1, but when the cases are followed up to the ninth month, no doubt the proportion would be decreased by the breast feeding being discontinued earlier than it should be. For this reason it is most desirable to keep these cases under close observation, as the infant mortality rate is so much higher in bottle fed infants to breast fed ones.

The total number of visits given to Births, Tuberculous and Ophthalmia Neonatorum, works out at 12 per day, and, taking into consideration the distances that have to be travelled, and the amount of time that is necessary to spend at some of the homes, it will be seen that a large amount of work is got through.

The minimum number of visits to be aimed at should be weekly for the first month, and once every month afterwards. In some cases, however, the Nurse finds it necessary to visit much oftener than this. In connection with health visiting, to obtain the best results, there ought to be other agencies at work, such as after-care committees or other bodies, and, when urgently necessary, the provision of help and advice to lying-in women and mothers should be obtained.

#### OPHTHALMIA NEONATORUM.

This disease was first made notifiable in 1912.

It is an extremely serious affection, which attacks the eyes of newly-born infants.

It often occurs in careless midwifery practice, and is caused by the entrance of bacteria into the eyes at the time of birth. It is the cause of a large proportion of the blindness found in our blind asylums. It is patent that the majority of these cases if they were properly attended to would not become blind. It is, however, little use having cases notified, unless prompt and efficient nursing and attendance can be supplied where necessary. The Authority should consider whether they will themselves sanction the Medical Officer to obtain the necessary help, as these cases are always urgent. In such cases, the eyes ought to be attended to every two or three hours, until the acute symptoms have abated, and to do this work properly it requires the services of a trained nurse.

It is one of the rules of the Central Midwives' Board, that whenever any inflammation, however slight, appears in the eyes of the babies, a medical man should be called in to advise. The difficulty the midwife finds in following out this rule, is that slight inflammation of the eyes of new born babies is of fairly frequent occurrence, and is generally remedied by washing with mild antiseptic lotion, and there is thus the temptation not to call in a medical man. The difficulty the women have is to distinguish the mild from the dangerous forms.

Following the lead taken by Dr. Snell, the Medical Officer of Health for Coventry, I have forwarded to each midwife in the Borough the following circular:—

“Public Health Department,  
West Hartlepool.

Dear Madam,

If all newly-born children had their eyes treated with a five per cent. solution of protargol, no cases of Ophthalmia Neonatorum would arise. A five per cent. solution of protargol may be obtained from any chemist at a cost of a few pence per ounce.

I hope the midwives in the Borough will adopt this preventative measure in their practices.

Yours faithfully,

H. E. GAMLEN,

Medical Officer of Health.”

#### DIRECTIONS FOR CLEANSING A BABY'S EYES.

As soon as a baby is washed, its lids should be opened with the first finger and thumb of the left hand, and the eyes should be washed out with warm water, squeezed in with a piece of cotton wool. The lids should now be dried, and a few drops of a five per cent. solution of protargol dropped in with an eye dropper. The drops must be left in the eye and not washed out. If the lids become swollen, red, or if the eyes get red, or if there is any discharge from them, a doctor should be informed at once. If previous to confinement there has been any discharge, a medical man should see the baby, whether its eyes are inflamed or not. Several babies have contracted Ophthalmia Neonatorum in the Borough during the last two years, and some of them have become blind from neglect of these simple precautions.

The Health Visitor has paid 24 visits to cases of Ophthalmia Neonatorum.

## RESPIRATORY DISEASES.

Bronchitis	...	...	...	...	144
Pneumonia and Broncho Pneumonia	...	...	...	...	62
					-----
Total					206
					-----

During 1912 there were 137 deaths due to the above causes, giving a mortality rate of 2.13, whilst during 1913 no less than 206 deaths were recorded, a death rate of 3.16 resulting.

## AGES.

Under 1.	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and upwards	Total
59	41	2	3	16	35	50	206

## MONTHLY RECORD OF DEATHS FROM THE ABOVE DISEASES.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov	Dec.	Total
Bronchitis	23	20	15	8	11	12	10	9	12	6	8	10	144
Broncho Pneumonia }	12	7	11	7	5	2	2	—	3	3	4	6	62
Totals	35	27	26	15	16	14	12	9	15	9	12	16	206

## BACTERIOLOGICAL DIAGNOSIS OF INFECTIOUS DISEASES.

The Medical Officer of Health has a private laboratory, which affords facilities locally for obtaining bacteriological assistance in the diagnosis of infectious diseases.

During the year 1913, 192 samples of sputum have been examined for tubercle bacilli, 91 being positive and 101 negative; 26 diphtheretic swabs have been examined, 17 being positive and 9 negative; 1 blood for typhoid fever, Widal's reaction, which was positive; 54 specimens of hair, suspicious of ringworm, 40 being positive and 14 negative.

40 samples of milk have been tested microscopically for tubercle bacilli, and in several instances acid-fast bacilli have been found. My experience is that the negative results found cannot always be relied upon, because, however carefully the milk is treated and examined, positive results are sometimes missed when examined micro-



scopically. For this reason, I am sending all samples of suspected milk to be treated by the biological method of examination, which takes the form of injection into guinea-pigs.

### BOROUGH ABATTOIR AND BUTCHERS' SHOPS.

Considerable attention has been devoted to the Abattoir and Butchers' Shops. They have been regularly inspected, and 363 visits have been made to the Abattoir. In addition, 177 inspections were made of Fish, Fruit and Meatshops. In connection with this work I have been intimately associated in the work done with both of the Sanitary Inspectors.

The Abattoir is visited daily by the Medical Officer of Health, and in the event of diseased meat being found, the carcasses as a rule are afterwards examined by your inspectors, and in this way they have obtained a good knowledge of meat under varying conditions.

During the year 1913, 64 beasts, 2 calves, 5 pigs and 5 sheep were submitted for my inspection at the Abattoir by the Superintendent.

The number condemned as unfit for food is shown in the following table:—

Animal.	No. of	Reason for Condemnation.
Beasts ...	8½	... Tuberculosis.
Beasts ...	1	... Found strangled in its stall.
Pigs ...	1	... Died in course of transit.
Sheep ...	4	... Inflammation.
Sheep ...	1	... Found dead in stall.

Fifty-seven carcasses and a half of a carcass were found to be locally affected with Tuberculosis, and after being stripped they were allowed to pass. In each case the offal was destroyed. The carcasses of four pigs which showed symptoms of cold were passed.

In all cases the butchers are allowed to strip the fat from condemned carcasses, but the fat is always used for tallow.

It is very gratifying to report that we have not had occasion to take any legal proceedings against any of the butchers in respect of unsound meat. They have always given assistance whenever it has been found desirable in the public interest to condemn any diseased,



unsound or unwholesome butcher's meat. In many instances I have been requested to give periodical and surprise visits to butchers' establishments, as it has been found to have a tonic effect upon the assistants.

One butcher was caught slaughtering on unlicensed premises on three occasions. In the first instance, legal proceedings were taken, and he was fined 10/- and costs. In the third case, legal proceedings are pending.

#### NUMBER OF ANIMALS SLAUGHTERED AT THE ABATTOIRS DURING THE YEARS 1912 AND 1913.

Year		Beasts		Sheep and Lambs		Calves		Pigs
1912	...	3,802	...	14,138	...	455	...	6,761
1913	...	3,744	...	13,955	...	467	...	6,662

The analysis of the quality of meat inspected, and the slight amount of which had to be condemned, speaks highly of its quality.

With regard to the premises inspected, and the methods of preparation, there is a great improvement in the conditions to those of previous years, and I have no hesitation in saying that the conditions compare favourably with those of other towns which I have inspected. I have gone more deeply into the subject of meat in a special report, which will be placed before the Health Committee.

#### MEAT, &c., DESTROYED AT THE REFUSE DESTRUCTOR AS UNFIT FOR HUMAN FOOD.

9½ Carcasses of Beasts.  
 7 Carcasses of Pigs.  
 5 Carcasses of Sheep.  
 1 Carcass of a Lamb.  
 183 Pieces of Offal.  
 119 Baskets of Red Currants.  
 12 Loads of Plums.  
 8 Tins of Potted Meat.  
 2 Stones of Plums.  
 7 lbs. of Grapes.  
 1 Stone of Tripe.  
 2 Loads of Eggs.

## OFFENSIVE TRADES.

Seven offensive trades are carried on within the Borough, as follows:—

Trade.				No. of Establishments.
Fat and Tallow Melters	...	...	...	2
Tripe Boilers	...	...	...	2
Gut Scrapers	...	...	...	1
Bone Boilers	...	...	...	1
Knackers' Yards	...	...	...	1

In reporting upon offensive trades in 1912, I stated:—

“The conditions under which gut scraping, tripe cleansing and boiling, and fat rendering are most unsatisfactory.

In some instances some of these processes ought not to be allowed where food is being prepared for sale, as it is impossible under these conditions to give the necessary attention which is required to regulate this work.

Gut scraping particularly is sometimes done in the closest proximity to food, and, however carefully this work is performed, there is always contamination.

Some provision ought to be made to further these attempts to procure pure food, by rendering it illegal to do gut scraping in the same room where food is in the process of preparation.”

Several butchers are desirous of having these casings prepared apart from their establishments, provided the Authority will find them suitable premises to do this work. A very suitable place could be made in the Abattoir yard.

## ICE CREAM SHOPS.

In my Annual Report for 1912 I stated:—

“I would strongly recommend that regulations be framed to control the making and selling of ice cream.

I particularly drew attention to the conditions under which ice cream was made. Since then the conditions have improved, but until regulations are made there will always be a danger to the health of the consumers of this commodity.

These premises have frequently been inspected, and particularly so during the summer months, when close supervision is necessary, as in some instances the ice cream is made in private dwelling houses in poor localities.

There are about 15 shops and premises in the Borough where ice cream is made."

I have on several occasions mentioned this and allied subjects to the Council, but so far no steps have been taken to give this weighty subject the attention it deserves.

An epidemic of illness, traced to contaminated ice cream, would hasten the Authority to a sense of their responsibility, and bring home to them that purity of food ought to be their first consideration.

#### FRIED FISH SHOPS.

Very offensive odours sometimes emanate from these shops where fish and potato frying take place. Action is being taken to mitigate as much as possible against this nuisance. The application of specially designed form of close fitting covers, fixed over the pans, to arrest the effluvia given off during the frying process, ought to be insisted upon.

This class of business ought to be scheduled as an offensive trade, and bye-laws framed for their control.

If this were done, great improvements would take place in businesses of this nature.

#### PARASITIC MANGE ORDER, 1911.

Mr. B. Hoadley, M.R.C.V.S., holds the appointment as Veterinary Inspector, and during 1913 he has been employed by the Authority under the above Order.

Under this Order, immediate notification of actual or suspected cases of mange in horses is received from the owner, police, horse slaughterers, or veterinary surgeons, who may be called in to the case. The suspected animals are then examined by the Veterinary Inspector, and also the entire stud when at rest. Affected animals are isolated and kept under observation until the disease has disappeared. Thorough disinfection of the premises, harness, utensils, feeding troughs, etc., is carried out under the supervision of the Veterinary Inspector.



The total number of outbreaks on premises where the disease was found to exist was 7, and the number of visits paid to these premises was 44, during the year.

The number of animals affected was 7, and of these four were discharged cured and three were destroyed.

### MILK AND CREAM REGULATIONS.

These regulations were framed for the purpose of preventing the addition of preservatives in milk, and for restricting the amount and kind of preservative that may be used in cream.

The 79 samples of milk which were forwarded to the Public Analyst for analysis were all examined for preservatives, but in no instance were preservatives found.

Very little cream is sold in the town, and no samples have been taken during the year.



SUMMARY OF SANITARY IMPROVEMENTS CARRIED OUT AS A  
RESULT OF INSPECTIONS MADE.

NATURE OF NUISANCES, &c.	Number of Nuisances Registered
To trap defective drains ... ..	69
„ Other faults ... ..	100
„ Cleanse and limewash dirty dwellings and workshops ...	101
„ Repair yard pavements ... ..	168
„ Repair spouts and fallpipes ... ..	182
„ Repair dwelling-house roofs ... ..	49
„ Convert privies and ashpits into water-closets and dry pans	734
„ Provide additional privies ... ..	1
„ Abate overcrowding ... ..	15
„ Abate overcrowding in cowsheds ... ..	1
„ Cleanse and repair cowsheds ... ..	2
„ Cleanse and repair bakehouses ... ..	8
„ Repair ashpits ... ..	3
„ Repair water-closets ... ..	128
„ Provide additional water-closets ... ..	20
„ Remove offensive accumulations of manure ... ..	40
„ Animals improperly kept ... ..	14
„ Offensive trades ... ..	1
„ Provide ashpit and pan-closet doors ... ..	244
„ Close polluted wells ... ..	10
„ Clean out soft water wells ... ..	28
„ Clean out offensive cesspools ... ..	1
„ Cease throwing slops into ashpits ... ..	2
„ Remove accumulations of offensive stagnant water ...	3
„ Provide a pure water supply ... ..	20
„ Other nuisances ... ..	714
	<hr/>
	2,658

## INSPECTIONS MADE.

- 6,315 Dwelling Houses, Shops, and other premises.
- 379 Factories and Workshops.
- 177 Fish, Fruit, and Meatshops.
- 93 Common Lodging Houses.
- 96 Houses let in lodgings.
- 209 Dairies, Cowsheds, and Milkshops.
- 17 Bakehouses.
- 9 Ice Cream Vendors' premises.
- 192 Complaints received attention.
- 813 Drains tested with smoke machine.
- 1,325 Informal Notices served.
- 413 Statutory Notices served.

## INFECTIOUS DISEASES.

- 812 Cases inquired into, including Tubercular Cases.
- 219 Cases removed to Port Sanitary Hospital.
- 455 Premises Disinfected.
- 2,595 Bottles of Sanitary Fluid given out.

## WATER SAMPLES.

A sample of water, as supplied to the town by the Hartlepoons Gas and Water Co., and ten samples of well water were obtained and sent to the Borough Analyst for analysis.

The former was certified to be of good wholesome quality for drinking purposes.

It was taken from a tap connected with the deep wells, the source from which the Hartlepoons Gas and Water Co. obtain their supply.

The samples of well water were all certified to be unfit for drinking purposes, and notices were served, requiring the wells to be filled in and the houses to be provided with town's water.

In seven instances the notices have been complied with, whilst in the remaining three the work is pending.

## DAIRIES, COWSHEDS AND MILKSHOPS.

There are within the Borough 108 Milkshops, 34 Purveyors, and 6 Cowkeepers.

209 visits have been made to this class of premises.

Altogether there are 8 cowsheds, which accommodate 48 cows.

In my Annual Report for 1912 I wrote:—

“Milkshops on the whole are not so satisfactory as they might be.

Premises are registered as milkshops only upon a satisfactory report being made that they are clean and unobjectionable, but afterwards they frequently sell all kinds of vegetables, which must cause the milk to be contaminated with dust, as the receptacles containing the milk are more frequently uncovered than covered.

The best solution of this difficulty would be legislation enforcing the yearly registration of milkshops, and it would be advisable in future to have the milk apart from the ordinary analysis, examined and reported upon microscopically, as in many instances the filthy condition of this food is far more injurious to the health of the consumer than the dilution, abstraction of cream, or of the toning of milk that takes place.”

During 1913 there has been marked improvements in several of these conditions, and in most instances we now find the milk covered over with fine muslin or cheese cloth, kept in place by a wooden hoop.

Printed notices are being prepared, and if they meet with the approval of the Local Authority they will be sent to each purveyor of milk.

These notices will draw the saleman's attention to rules which, if complied with, will cause no inconvenience, and will protect the public against much disease.



## COMMON LODGING HOUSES.

There are 16 Registered Common Lodging Houses within the Borough, with a registered accommodation for 406 lodgers.

During the year, 93 visits were made, both during the day and night time, to ascertain whether the bye-laws were being infringed.

Of these houses, 11 are registered under Section 69 (2) of the Public Health (Amendment) Act, 1907, for a period of twelve months only.

Two new houses have been registered during the year.

It was necessary to institute proceedings against the occupier of No. 34, South Street, for receiving lodgers therein without the premises being registered.

This occupier's registration as a keeper of a Common Lodging House was cancelled last year.

The following is a list of the Registered Common Lodging Houses in the Borough, together with the number of lodgers:—

No.	Address.	Registered Number of Lodgers.	Number of Rooms.
1.	25, York Street ... ..	27	8
2.	18, Rokeby Street ... ..	18	6
3.	138, Burbank Street ... ..	33	8
4.	3, South Street ... ..	14	3
5.	32, South Street ... ..	16	3
6.	23, St. John Street ... ..	18	4
7.	6, Knowles Street ... ..	15	4
8.	26, George Street ... ..	18	5
9.	14, Mainsforth Terrace ... ..	20	7
10.	15, Mainsforth Terrace ... ..	19	8
11.	4, South Street ... ..	22	4
12.	7, Tennant Street ... ..	30	8
13.	George Street (Albion Chambers)	66	6
14.	3, Redworth Street ... ..	12	2
15.	16, Mainsforth Terrace ... ..	56	23
16.	2, Edward Street ... ..	22	4

## HOUSES LET IN LODGINGS.

The number of Registered Houses let in lodgings in the Borough is 23 compared with 21 on the Register last year.

One house was closed as unfit to be occupied in lodgings.

96 visits have been made, both during the day and night time, to ascertain whether overcrowding, uncleanness, etc., existed.

The number of these houses shows no diminution.

The ease with which ridiculously high rents can be obtained for so-called furnished rooms is a great incentive to a certain class of persons, who rent a house from an owner for about 5/- or 6/- per week, sub-let each room furnished at a rental of usually 4/8 per week.

The person renting the whole house sometimes makes as much as 10/- to 18/- profit per house per week.

I again venture the opinion that bye-laws should be framed by the Local Authority, with a view to cards being fixed in each room, addressed to the occupier (without name), and owner stating the cubical capacity and the maximum number of lodgers allowed, (a) if the room be used as a living and sleeping room, and (b) if used for sleeping only.

## HOUSES FUMIGATED.

The beds, bedding and other articles likely to retain infection, have been removed to Corporation Disinfecting Chambers from 298 houses. In 157 other instances the beds, etc., were fumigated in the room and not removed to the Disinfecting Chambers. Altogether, 493 rooms were fumigated in 455 houses.

In addition to the houses fumigated and disinfected after infectious fevers, etc., every house in which a death occurs from phthisis was fumigated, and, where possible, the bedding was removed to be disinfected by steam.

Further, on a reasonable application from any householder to have any room or bedding disinfected or fumigated after a severe illness or death, this was done by your Disinfector under my instructions.

Dwelling houses which were found to be in a filthy or verminous condition were fumigated.

Disinfectants and lime are given free, and brushes lent to the poor for the cleansing of their homes and premises.

Beds, bedding and sundries disinfected by apparatus and in dwellings:—

Beds and Bedding	...	...	...	330
Pillows and Bolsters	...	...	...	662
Carpets and Rugs	...	...	...	146
Articles of Clothing	...	...	...	323
Sheets, Blankets and Quilts	...	...	...	887
Sundry Articles	...	...	...	248
				—
Total ...				2,596

65 articles were destroyed at the Refuse Destructor.

On several occasions rooms and their contents in the Cameron Hospital were disinfected.

#### SCAVENGING.

The contractors have carried out their work on the whole in a satisfactory manner.

The bulk of the refuse is destroyed at the Destructor, and the remainder is removed to agricultural land on the outskirts of the town.

Towards the end of the year it was found that night soil from a neighbouring town was being sent by rail, and unloaded during the day time at the sidings at Seaton Carew Station, and the material was being carted along the public highway to agricultural land.

The attention of the Railway Authorities was drawn to the serious nuisance caused, and the practice has since been discontinued.



TABLE OF LOADS REMOVED AND DESTROYED.

1913.	Total Number of Loads of House Refuse collected and distributed.			Loads of House and Sundry Refuse Consumed at Destructor.		
Month.	To Destructor.	To Farms.	Total.	Collected by Corporation	Delivered by Trades- people.	Total.
January	1,564	273	1,837	1,664	189	1,753
February	1,428	266	1,694	1,428	166	1,594
March	1,422	364	1,786	1,422	162	1,584
April	1,579	291	1,870	1,579	171	1,750
May	1,529	287	1,816	1,529	184	1,713
June	1,404	204	1,608	1,404	186	1,590
July	1,467	165	1,632	1,467	177	1,644
August	1,361	134	1,495	1,361	160	1,521
Sept.	1,458	100	1,558	1,458	189	1,647
October	1,450	224	1,674	1,450	219	1,669
Nov.	1,461	215	1,676	1,461	213	1,674
Dec.	1,602	314	1,916	1,602	176	1,778
	17,725	2,837	20,562	17,725	2,192	19,917

PROSECUTIONS BEFORE MAGISTRATES BY THE SANITARY AUTHORITY, 1912.

Date.	Nature of Offence.	Fines.	Orders Made.	Costs.
February 21st ...	Allowing premises to be occupied as a Common Lodging House without the same being registered ...	£2	...	18/-
February 21st ...	Gregory's Powder not of the nature, substance and quality demanded	...	Magistrates decided that an offence had been proved, but did not inflict a penalty, upon the defendant paying the costs ...	8/-
June 6th ...	Milk not of the nature, substance and quality demanded ...	£1	...	8/6
September 24th ...	Slaughtering on unlicensed premises	10/-	...	19/-
September 24th ...	Milk not of the nature, substance and quality demanded ...	10/-	...	8/6
September 24th ...	Margarine not labelled according to the Act ...	5/-	...	8/6
November 19th ...	Milk not of the nature, substance and quality demanded ...	£1	...	19/-
December 24th ...	" " " "	£1	...	£1
December 24th ...	" " " "	£1	...	£1
December 24th ...	Not abating a nuisance ...	...	Order made for work to be done within 30 days, and to pay costs...	14/6
				£7/4/0

## FOOD AND DRUGS.

127 samples have been taken during the year.

98 were certified to be genuine, 2 doubtful, and 27 adulterated.

Articles.	No. Taken.	Genuine.	Doubtful.	Adulterated or below normal standard.
Milk ... ..	79	55	—	24
Butter ... ..	16	16	—	—
Paregoric ... ..	4	2	1	1
Gregory's Powder ... ..	1	—	—	1
Camphorated Oil ... ..	5	5	—	—
Sausages ... ..	5	5	—	—
Margarine ... ..	4	4	—	—
Lard ... ..	3	3	—	—
Strawberry Jam ... ..	1	1	—	—
Raspberry Jam ... ..	1	—	1	—
White Wine Vinegar ... ..	2	2	—	—
Gin ... ..	2	2	—	—
Rum ... ..	2	1	—	1
Whiskey ... ..	2	2	—	—
	<hr/> 127	<hr/> 98	<hr/> 2	<hr/> 27

## SUMMARY.

First Quarter ... ..	...	...	...	8
Second Quarter ... ..	...	...	...	30
Third Quarter ... ..	...	...	...	43
Fourth Quarter ... ..	...	...	...	46
			Total ...	<hr/> 127

The following samples were taken informally:—

- 1 Sample of Butter.
- 1 Sample of New Milk.
- 2 Samples of Paregoric.
- 2 Samples of White Wine Vinegar.
- 3 Samples of Camphorated Oil.

In addition to the number of formal samples of milk taken during the year for analysis, numerous informal samples of milk were purchased and tested by means of a lactometer, and where the quality of the milk appeared to be below standard, a formal sample was immediately taken.

This informal testing of milk by your Inspectors has undoubtedly in my opinion been the means of detecting adulteration.



The undermentioned samples, upon analysis, gave results equivalent to the following percentage of adulteration:—

No. of Samples.	Nature of Samples.	Result of Analysis.	Remarks.
701	Paregoric ...	Certified to contain only 54% absolute alcohol ...	Vendor cautioned by Health Committee.
702	Gregory's Powder ...	Sample made up with magnesium carbonate instead of magnesium oxide	Proceedings instituted against vendor. Magistrates decided an offence had been committed, but would not inflict a penalty, if defendant paid costs.
713	New Milk ...	Below standard ...	Cautioned by Health Committee.
715	New Milk ...	„ „ ...	„ „ „
717	New Milk ...	„ „ ...	„ „ „
720	New Milk ...	„ „ ...	„ „ „
722	New Milk ...	„ „ ...	„ „ „
729	New Milk ...	11.40% deficient in fat ...	Proceedings instituted against vendor.
740	New Milk ...	1.30% added water...	Vendor cautioned by Health Committee.
741	New Milk ...	1.40% added water...	„ „ „
743	New Milk ...	1.40% added water...	„ „ „
745	New Milk ...	1.4% added water...	„ „ „
747	New Milk ...	18.30% deficient in fat ...	Proceedings instituted against vendor.
753	New Milk ...	6.7% deficient in fat ...	Explanation demanded by Health Committee. Explanation accepted.

No. of Samples.	Nature of Samples.	Result of Analysis.	Remarks.
755	New Milk ...	1.90% added water...	Vendor cautioned by Health Committee.
759	New Milk ...	4.60% added water...	" " "
761	New Milk ...	4.00% added water...	" " "
780	Raspberry Jam ...	Doubtful quality ...	" " "
783	New Milk ...	15% added water ...	Proceedings instituted against vendor.
786	New Milk ...	1.3% added water ...	Vendor cautioned by Health Committee.
791	New Milk ...	3.2% added water ...	" " "
794	New Milk ...	2.5% added water ...	" " "
796	New Milk ...	2.2% added water...	Vendor cautioned by Health Committee.
797	New Milk ...	1.7% added water...	" " "
802	New Milk ...	18.12% added water	Proceedings instituted against vendor.
806	New Milk ...	14.90% added water	" " "
813	Paregoric ...	Sample below average quality ...	Explanation demanded by Health Committee. Explanation accepted.
817	New Milk ...	2.94% added water...	Cautioned by Health Committee.
826	Rum ...	26.28 degrees under proof ...	" " "

## HOUSING ACTS.

The Housing and Town Planning Act, 1909, Section 17, provides that every Local Authority shall cause to be made from time to time inspection of their district, with a view to ascertaining whether any dwelling house therein is in a state so dangerous or injurious to health as to be unfit for habitation.

The Housing (Inspection of Districts) Regulations, 1910, provides that records must be kept of every house inspected, showing the sanitary condition of the dwelling house in detail, action taken by the Local Authority, and the result of such action.

576 dwelling houses were inspected under and for the purpose of Section 17 of the Housing and Town Planning Act, 1909.

As a result of such inspections, the following steps were taken:—

(1)	Number of representations made to Local Authority, with a view to the making of closing orders	... ..	16
(2)	Number of closing orders made	... ..	15
(3)	Number of houses against which closing orders were made during year 1912, and were determined during year 1913	... ..	10
	Number of houses against which closing orders were made and determined during year 1913	... ..	2
(4)	Number of houses, the defects in which were remedied without the making of closing orders	... ..	29
(5)	Houses made fit for habitation after the making of closing orders	... ..	1
(6)	Houses demolished voluntarily by the owners after the making of closing orders	... ..	8
(7)	Demolition orders made by the Local Authority	... ..	5
(8)	Notices served under Section 15	... ..	0

In all 15 cases of overcrowding were detected and dealt with during the year. None of the cases could be described as serious.



REPRESENTATIONS MADE TO LOCAL AUTHORITY, UNDER  
SECTION 17 OF THE HOUSING AND TOWN PLANNING  
ACT, 1909.

Situation of House.	Chief Defects.	Action Taken and Results.
15, Ann Street ...	Empty. In a ruinous condition ...	Closing Order made. Premises boarded up.
1 & 3, Bridge Street	„ „ ...	„ „
22 & 24, Tennant Street	„ „ ...	„ „
5 & 5a, Pilot Street...	„ „ ...	„ „
2, Harrison Street ...	„ „ ...	„ „
4, Harrison Street ...	Premises in a dilapidated condition ...	Premises being put into a reasonable state for habitation without the necessity of serving a Closing Order.
8, Harrison Street ...	Empty. In a ruinous condition ...	Closing Order made.
10, Harrison Street ...	„ „ ...	„ „
12, Harrison Street ...	„ „ ...	„ „
8 & 10, Ann Street ..	Premises in a dilapidated condition ...	Closing Order made. Premises boarded up.
1, Pimlico Street ...	„ „ ...	Closing Order made. Repairs and alterations in hand.
23, Thomas Street ...	General dilapidations and dampness ...	Closing Order made. House since put into habitable condition.

## PRIVY MIDDENS.

It is with the greatest satisfaction that, owing to the combined efforts of your Inspectors and the Health Committee, through their Sub-Committee, I am able to record that the number of privy middens converted into water-closets and circular bins for ashes easily outnumbers that for any previous year.

The question of what system for the storage and removal of house refuse, as mentioned in my last Annual Report, is, at the time of writing, in hand by the Borough Engineer.

During the year, 719 privies and ashpits were converted into water-closets and circular pans for ashes.

In addition to these, 5 privy pans (movable receptacles) were done away with, and water-closets and circular pans substituted.

The number of conversions which have taken place during the past twelve months in the respective wards is shown:—

Wards.	Privies and Ashpits converted into Water-closets and Dry Ash Pans.		Additional Water-closets provided.
North	...	56	20
West	...	33	
Park	...	113	
South-West	...	110	
South-East	...	149	
Central	...	203	
North-East	...	6	
Seaton	...	49	
Totals	...	719	

The following table shows the number of privy middens converted into water-closets, etc., each year from 1902 to the end of 1913:—

Year.	Number of Conversions.		
1902	...	...	308
1903	...	...	125
1904	...	...	36
1905	...	...	69
1906	...	...	87
1907	...	...	81
1908	...	...	33
1909	...	...	36
1910	...	...	33
1911	...	...	125
1912	...	...	223
1913	...	...	724

The following table shows approximately the number of closets of each type in the Borough at the end of 1913:—

Number of Privies, Fixed Receptacles	...	...	2,522
„ „ Movable Receptacles	...	...	859
„ „ Water Closets, Fresh Water Closets	...	...	10,650
„ „ Waste Water Closets	...	...	—
„ „ Hand Flush Closets	...	...	3

#### DRAIN TESTING.

During the year just closed, 813 drains were tested with the smoke machine.

Of this number, 724 were in connection with the conversion of privy middens and privy pans into water-closets.

The remaining tests were made on complaint or request by the occupiers of premises, or in connection with your Inspectors' investigations, when visiting premises where there were cases of infectious disease.

#### RAG FLOCK ACT, 1911.

This Act was framed for the purpose of preventing the use of unclean rags in the making of bedding.

Two samples of flock were obtained and forwarded to the Borough Analyst, who certified both samples to comply with the standard of cleanliness prescribed by the regulations made by the Local Government Board.

---

### FACTORY AND WORKSHOP ACT, 1901.

*Report on the administration of this Act in the County Borough of West Hartlepool for the year 1913.*

The number of Workshops on the Register at the end of the year was 328, made up as follows:—

Workshops	...	...	...	299
Domestic Workshops	...	...	...	19
Workplaces	...	...	...	10
				<hr/> 328



Thirty-five notices have been received from H.M. Inspector of Factories, giving information of defects in Factories and Workshops remediable under the Public Health Acts.

In 28 cases the defects have been remedied, and in 3 instances the use of the premises as workshops has been discontinued. In one instance it was found impossible to alter the privies to water-closets, owing to the absence of a suitable sewer, and in the three cases the work is pending.

A great advance has been made during the year in the provision of the water carriage system in many of the factories and workshops in the Borough, in place of insanitary privies, with which the premises were previously provided.

#### HOMEWORK.

15 inspections have been made of Outworkers' premises, and in two instances it was necessary to serve notices to cleanse the premises. The requirements of the notices were carried out.

#### BAKEHOUSES.

There are 46 Bakehouses on the Register, of which 4 are underground.

One newly-established Underground Bakehouse was discovered during the year, and the owner's and occupier's attention was drawn to the fact that this was an infringement of the Factory and Workshop Act, 1901, whereupon its use was discontinued.

In 8 instances it was necessary to require the cleansing and limewashing of the walls and ceilings.

#### WORKSHOPS ON THE REGISTER, DECEMBER 31st, 1913.

##### Number and Nature of various Trades.

Dress and Mantle-making ...	46	Fat Renderers ...	...	6
Milliners ...	14	Tinsmiths ...	...	3
Tailors ...	20	Tripe Boilers ...	...	4
Boot Makers and Repairers...	30	Photographers ...	...	4
Bakehouses (Retail) ...	46	Sailmakers ...	...	4
Bakehouses (Wholesale) ...	1	Picture Framers ...	...	4
Joiners and Cabinet Makers	33	Fish Curers ...	...	3
Plumbers ...	22	Drysalters ...	...	3
Blacksmiths ...	13	Harness Makers ...	...	3
French Polishers ...	3	Miscellaneous ...	...	45
Cartwrights ...	9			
Cycle Repairers ...	8			
Laundries ...	4			
		Total ...		328

The following tables are included at the request of the Secretary of State:—

## Factories, Workshops, Laundries, Workplaces, & Homework.

### 1. Inspection.

Premises.	Number of Inspections.	Written Notices.
Factories (including Factory Laundries) ...	95	25
Workshops (including Workshop Laundries) ...	279	57
Workplaces (other than Outworkers' premises included in part 3 of this Report) ...	5	1

### 2. Defects Found.

Particulars.	Found.	Number of Defects Remedied.
<i>Nuisances under the Public Health Acts:</i>		
Want of Cleanliness ...	20	20
Want of Ventilation ...	3	3
Overcrowding ...	—	—
Other Nuisances ...	19	19
<i>Sanitary Accommodation:—</i>		
Insufficient ...	25	21
Unsuitable and Defective ...	11	10
Not separate for sexes ...	4	4
<i>Offences under the Factory and Workshops Act:</i>		
Illegal occupation of Underground Bakehouses (S. 101) ...	1	1
Breach of special sanitary requirements for Bakehouses (SS. 97 to 100) ...	8	8
Other offences (excluding offences relating to outwork which are included in part 4 of this Report) ...	—	—
	91	86

### 3. Other Matters.

Class.	Number.
<i>Matters notified to H.M. Inspector of Factories:—</i>	
Failure to affix Abstract of the Factory and Workshops Act (S. 153) ...	9
<i>Action taken in matters referred to H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshops Act (S. 5)—</i>	
Notified by H.M. Inspector ...	35
Reports (of action taken) sent to H.M. Inspector	32
<i>Underground Bakehouses (S. 101):—</i>	
Certificates granted during the year ...	—
In use at the end of the year ...	4



# HOMEWORK.

NATURE OF WORK.  (1)	OUTWORKERS' LIST. SECTION 107.										Number of Inspections of Outworkers Premises.  (12)	Outwork in Unwholesome Premises Section 108.			Outwork in infected Premises Sections 109, 110.		
	List received from Employers.						Number of Addresses of Outworkers received from other Councils.  (8)	Number of Addresses of Outworkers forwarded to other Councils.  (9)	Prosecutions.			Instances.  (13)	Notices Served.  (14)	Pros'cut'ns  (15)	Instances  (16)	Orders made S. 110  (17)	Pros'cut'ns Sections 109, 110  (18)
	Twice in the year.			Once in the year.					Failing to keep or permit inspection of Lists.  (10)	Failing to send Lists.  (11)							
	Lists.  (2)	Outworkers.		Lists.  (5)	Outworkers.												
		Contractors.  (3)	Workmen.  (4)		Contractors.  (6)	Workmen.  (7)											
Wearing Apparel:—																	
(1) Making, etc. ...	6	6	32	5	2	29	None	None	None	None	15	2	2	None	None	None	None
(2) Cleansing and Washing																	
Lace, Lace Curtains & Nets																	
Artificial Flowers ...																	
Nets, other than Wire Nets																	
Tents ... ..																	
Sacks ... ..																	
Furniture and Upholstery...																	
Fur Pulling ... ..																	
Feather Sorting ... ..																	
Umbrellas, etc. ... ..																	
Carding, &c., of buttons, &c.																	
Paper Bags and Boxes ...																	
Basket Making ... ..																	
Brush Making ... ..																	
Racquet and Tennis Balls...																	
Stuffed Toys ... ..																	
File Making ... ..																	
Electro-plate ... ..																	
Cables and Chains ... ..																	
Anchors and Grapnels ...																	
Cart Gear ... ..																	
Locks, Latches and Keys...																	
Pea Picking ... ..																	
Total ...	6	6	32	5	2	29	—	—	—	—	15	2	2	—	—	—	—





VARIOUS PUBLIC HEALTH MATTERS WHICH REQUIRE  
IMMEDIATE CONSIDERATION.

(1) Power to engage the temporary services of a local nurse in acute cases of Ophthalmia Neonatorum.

(2) MANURE. Regulations as to the periodical removal of manure under Section 50, Public Health Act, 1875.

(3) MILKSHOPS. Regulations should be made registering milkshops for a period not exceeding twelve months.

(4) ICE-CREAM SHOPS. Registration of premises and vendors, and regulations governing the making, storing and the sale of this article.

(5) OFFENSIVE TRADES. Framing of bye-laws with the view of the better control and supervision of this class of business (Section 112, Public Health Act, 1875).

(6) FACTORIES AND WORKSHOPS. Bye-laws with respect to provision of means of escape in case of fire.

(7) HOUSES-LET-IN-LODGINGS. Suitable bye-laws governing houses-let-in-lodgings.

## SCHOOL REPORT.

---

Review of the principal details found on inspection of school children, by the four part-time Medical Officers.

This report refers to the year 1913, and 16 schools with 42 departments are dealt with.

The Mentally Defective School, which is a department of the Ward Jackson School, is not dealt with.

The accommodation in these departments is 14,042.

The average number on the register is 12,513.

The average attendance is 11,236.

During the year, 3,338 children were examined, 1,719 being boys and 1,619 girls.

I have three times examined the schools during the year, as to their hygienic conditions, and have found an improvement after each inspection. There are no details requiring special comment.

### METHOD OF INSPECTION.

This was fully gone into in my report for 1912, and, during the year, the same methods of procedure have been followed. I advised:—

- (1) That all defective children be carded, and
- (2) That all defects be reviewed after a few months.

Then one would be able to answer the questions:—

- (a) Has some reasonable effort been made to cure the child?
- (b) Has the treatment been adequate, and, if not, why not?
- (c) What has been the result of the treatment?

I have received from the Local Education Authority a letter, dated 16th April, 1913, addressed to them by the Board of Education, with reference to the working of the arrangements made by the Authority in connection with their School Medical Authority.



The attention of the Authority is invited on several points, namely :—

- (1) The re-examination, after a suitable interval, of children found to be defective at the routine examination, with a view to ascertain whether appropriate treatment has been obtained, and the results of such treatment.
- (2) The co-operation of the work of the School Medical Officer and the School Attendance Officers.
- (3) The more systematic arrangement for the control of cases of infectious disease.

It should be pointed out that the Board are prepared to take into account work of this kind for the purpose of the assessment of a grant under their Medical Treatment Grant Regulations. This they are empowered to do, under paragraph 4 of Circular 792, to Local Education Authorities, dated 9th April, 1912.

The Board propose that the Authority shall provide medical and surgical treatment for the ailments of school children in the following class of cases, viz., scabies, verminous heads, impetigo discharging ears, minor eye cases, and ringworm, and if they are satisfied with the Authority's provision for medical inspection they will under their Regulations assist in the cost. If the work under this head is carried out satisfactorily and thoroughly the Board are prepared to make a grant up to 50% of the sums expended. The question whether or no the work is done satisfactorily will depend upon the report of your School Medical Officer, and the arrangements for the following up of defects discovered at the school medical inspection. The grant will moreover depend upon the character and completeness of the medical inspection, and the degree of efficiency with which it is carried out. It is also necessary that the scheme of the Authority should provide for the inspection of all children under their control. At the present time the conditions laid down by the Board, as necessary for the purpose of obtaining such a grant, are not complied with, and the town therefore receives nothing from the governing body in this respect.

This circular, with the same object in view, proposes the further examination (including the examination of defective eyesight), at a School Inspection Clinic, of children who have been found to be defective at the routine inspection.

With the services of the School Nurse available, it would seem greatly to the advantage of the Authority to establish such a centre, and from the experience I have had in following up defects, advising as to their treatment, and, having my advice carried out, I am strongly of the opinion that the establishment of a School Clinic would be of immense advantage to the town, not only in saving a large sum in increased school attendance, but also in the bettering of the health of the children and of the town in general. In September I had the advantage of a visit from a Medical Inspector of the Board, who advised me regarding the requirements of a School Clinic and the mode of fulfilling the regulations of the Board in respect to it. Several rooms would be required for the purpose, the minimum being four, namely, a waiting room, a consulting room, a surgery, and a room for the School Medical Officers, Attendance Officers and Nurse. There would be an expenditure in respect of the following items:—

- (a) Fittings, comprising furniture, floor covering and shelving, costing in all about £50 or £60.
- (b) Equipment, including drugs, instruments (including a microscope costing £14) at an outlay of about £60.
- (c) Upkeep, viz., heating, lighting, caretaker, etc., which I estimate at £50 per annum.

All these items would be subject to the approval of the Board, and if their requirements were complied with they would repay one half of the total cost, both of initial outlay and annual expenditure.

With regard to the working of the School Clinic, it should be pointed out that the building would be open to all scholars daily, with the School Nurse in attendance, and she would carry out the treatment prescribed by the School Medical Officer, and under his directions. The class of diseases which would be treated are those mentioned above, and it is important to note that the great majority of cases would be those which are not at present receiving medical attention, and those which, owing to their being chronic, receive no treatment likely to permanently benefit them. Where the parents are in a position to pay for the treatment they would be expected to refund all or part of the cost.

It would be advisable to have the services of a local eye specialist to attend at the School Clinic, for the purposes of examining the eye cases.



If this course were decided upon, it would be necessary to provide further apparatus at a cost of about £20.

There are a large number of cases of ringworm in the Borough, and these are now being excluded from attendance at school until they are proved to be free from the disease by microscopic evidence. In the past a large number were allowed to return to school on the supposition that a cure had been effected, but in a large percentage of cases I have found, on microscopic examination, distinct evidence of the disease.

In order to cope with ringworm, it has been demonstrated that the best and most speedy cures have been brought about by the X-ray treatment.

In the past the town has greatly suffered by loss of grant by the exclusion of children suffering from this disease from school for much longer periods than is absolutely necessary, and by employing the modern treatment in place of the ordinary drug treatment it would follow that the period of exclusion would be materially reduced. The X-ray treatment has been proved to be the only scientific means which effects a definite cure, and I estimate that in cases which now entail an absence of eight months or thereabouts, under the obsolete method, the period will be only six weeks.

The apparatus would necessarily be costly, the cost of a full group of machinery with the latest appliances being £80. I believe that in the course of a few years this treatment would be the means of freeing the Borough from the disease.

There is at present an arrangement by which persons suffering from diseased and enlarged tonsils and adenoids are treated at the Cameron Hospital. This arrangement might still hold good, but a better and more expeditious plan would be to have the necessary work done at the School Clinic, and the local contribution of £50 to the Cameron Hospital would be saved. The Borough of South Shields has a Surgical Clinic, and it is found to work admirably.

Regarding the cost of the treatment of eye diseases, ringworm, tonsils and adenoids, if the scheme were adopted by the Authorities and approved by the Board, one half of the cost would be borne by the Board.



The Board of Education have decided after April 1st, 1914, to have all children medically examined between the ages of twelve and thirteen years, together with children over thirteen years of age, who have not already been examined after reaching the age of twelve. Furthermore, after this date, there will be a routine inspection of an intermediate age—groups of all children between the age of eight and nine, thus making three groups of examinations, viz., “entrants,” eight to nine group, and leavers, in place of the two groups previously.

Owing to this alteration, the work done by your Medical Inspectors and your School Medical Officer will be increased by one-third.

I have for several weeks been doing all the following up which would be required under this scheme, in order to judge the amount of labour entailed and the benefits gained by my visits. Here it was necessary to keep in closest touch with the reports forwarded by the School Nurse, Teachers, School Medical Officers, and School Wardens. During the time I particularly noticed—

- (1) That there was a large amount of unnecessary non-attendance at school, owing to the statement of the mother that the child was absent on account of illness, but in these cases I often found the child at home doing the work of the house.
- (2) That there were a large number of minor ailments, which could quickly be remedied by medical attention.
- (3) That there were many other ailments, particularly those requiring operative interference, but which they were not receiving.
- (4) That there were a great number of children with verminous heads, and the conditions arising from vermin.

In several cases I had the hair cut, and the child returned to school in a few days, after an absence of many weeks.

In order to show the necessity of adopting the scheme, I have set out below, in detail, some of the defects found during the routine examination of the children of several of the schools.

**DEFECTIVE VISION.**—Of 8,000 children examined, 476 were scheduled as requiring their vision attended to. The majority of these defects could be corrected by glasses.

TONSILS AND ADENOIDS.—Of 1,147 children examined, 64 were scheduled as requiring operations upon the throat and nose.

RINGWORM.—28 cases have so far been excluded from school. I estimate that if all cases were under observation, there would be 50 cases of ringworm for exclusion.

It is only where a School Clinic is provided that the School Medical Officer is in a position to judge of the nature and effectiveness of treatment given to children with defects, as all the cases in the Clinic are under his direct observation and control. A complete record of all cases could be secured.

As it only deals with certain cases, it is not open to the objection sometimes lodged against hospitals, and its scope may be considered as assisting other agencies and not in competition to them.

It is important to note that, in the event of the scheme being satisfactory to the Board of Education, they would be prepared to pay 50 per cent. of the salaries earned by the School Medical Officer and his four assistants, which is thus equal to £250, making a saving to the town in the present arrangements of £125.

An alternative scheme would be for a whole-time Medical Officer to be appointed in place of the four part-time Medical Officers. In that event he would be able to do the work of the School Clinic, and follow up each case and give individual attention where necessary. He would be Assistant Medical Officer of Health, and might with advantage assist at the Tuberculosis Dispensary, thus relieving the monotony of everyday school medical examinations.

The policy I advised, in following up defects, in order to have them remedied, has to some extent been carried out, but as the work done by the School Medical Inspectors consists only of inspection, and the work done by the School Nurse is limited to a few ailments, it can be easily seen that no serious step has been taken so far to remedy the defects found by the School Medical Inspectors and Nurse.

In many cases a woman attendance officer, particularly if she has a nursing training, would have exploited fictitious pleas of illness, discriminated unhealthy conditions, and also prevented children returning to school when not in a fit condition.



The work of inspection has been greatly facilitated, by the ready and willing help afforded by the teachers in the various schools. They have all shown a keen desire to do all in their power for the betterment of the health of the children under their care, and for the improvement of the conditions under which they have to work.

The work done by the School Medical Inspectors leaves nothing to be desired, and at all times they have given their willing co-operation in the work.

## REVELATIONS OF MEDICAL INSPECTORS, BASED UPON THE REPORTS GIVEN BY THEM.

CLOTHING AND FOOTWEAR.—These are a rough index of the social status of the conditions under which the child is living, provided it is not specially prepared for examination, which unfortunately is sometimes the case.

Often, particularly amongst anxious and careful mothers, the children are very much overclothed, the result being they are continuously perspiring and catching cold.

Where the condition of the boots is bad, the children often suffer in wet weather with wet feet and stockings, and then the child would be much better barefooted.

There are marked differences in the condition of the clothing and footwear in the different schools.

## CLEANLINESS.

The number and percentages in the above table are of children found at the routine inspection not to have clean bodies and heads, and, as verminous conditions are often at the same time found on these children, they are included in the classification.

The percentages would be much higher if the children were examined during a surprise visit, and not prepared for examination.

It would be greatly to the benefit of dirty children if they were sent on arrival at the school to be washed. If a cleansing station was provided it would be an excellent plan, as part of practical hygiene, to have these children bathed and cleansed under supervision.



This demonstration of the extra comfort of cleanliness, as compared with filthiness, would sometimes be a life-long reminder, and assist them when they were thrown upon their own resources.

Often teaching will not make a dirty mother clean, as she has grown accustomed to dirt. It is best to educate the child at school, because later on she will have a home and children of her own.

A certain number of cases have been before the local magistrates, and the parents have been convicted for neglect.

### CLEANSING STATION.

To effectively carry out the scheme for stamping out filth and vermin amongst school children in the schools, it is necessary to have a Cleansing Station.

In my Annual Report for 1912 I showed how necessary it was for the Local Authority to supply a Cleansing Station, and until this is provided there is no possibility of bringing pressure to bear upon parents who habitually neglect their children, except through the officials of the National Society for the Prevention of Cruelty to Children. It is therefore incumbent upon the Local Authority to provide the best means of ridding infected houses, parents and children of their filth and vermin, and as the Council have already supplied a School Nurse, her present efforts would in a short time assist in getting rid of filthy and verminous scholars.

The parents would heartily welcome and support the scheme, except a few, and these will soon fall in line.

At present, our mode of procedure is not satisfactory, the Nurse, Teachers, and Medical Officers, are constantly picking out dirty children. In some few cases this is sufficient, but in the majority the condition is soon forgotten. It is not brought home to the parents, because at subsequent visits many of the children are again found to be in a filthy condition. The failure is the lack of facilities in following up the cases.

The Children's Act of 1908 could then be brought into force, and the procedure adopted would be as follows:—

The School Nurse visits the school, examines all the children, and where any of them are found verminous in their clothes or their bodies, a card is sent to the parents in a

closed envelope, informing them of the condition of their children, and ordering them at once to take steps to remedy it. On the back of the card the fullest instructions are given, to carry out effectively the cleansing process for the clothing and the person. A lapse of forty-eight hours is allowed to take place, and then the Nurse visits the school and examines the children whose parents have been notified. If the child is still in a dirty condition, the following steps are taken: A second notice is served upon the parent by the Attendance Officer. This notice orders the parent to carry out the instructions set out on the card, which are the same as those given on the first card. The parents are informed that if the defects are not remedied the Council will take steps under the Children's Act, Section 122, which is fully set out. There is also a notification that the child's hair may be cut off by the officers of the Council. It is also provided that if the parents have no conveniences at home for carrying out the cleansing operations, they may take their children to the Cleansing Station, full particulars, of the place, etc., being given, and an authorization for the Cleansing Authorities to carry out the work. In addition to the second notice, a notice is served on the Medical Officer of Health for the Borough in which the child resides, asking him to deal with the home, under the local Act. This means that the bedding will be taken away and cleansed. Thus the machinery used to secure the cleanliness of the child will also have an enormous effect on the cleanliness of the homes. When the Nurse receives intimation that the second notice has been served, after twenty-four hours, she again visits the schools, and, if the necessary cleansing has not been carried out, will take the child to the Cleansing Station herself, where it will be compelled to undergo the cleansing process. She will, if necessary, cut its hair. At first there may be some little trouble, but a case or two before the magistrates will soon have the desired effect. This, however, does not complete the scheme. As soon as the children have been cleansed, a further notice is served on the parents, warning them that if it is brought under the notice of the Council, that the person or clothing of their child are again allowed to become unclean, proceedings will be taken before a magistrate, and they will be liable to a fine not exceeding 10/-. In such a case, another



notification is sent to the parents, and, at the same time, a summons is issued, but before the hearing of the summons, within twenty-four hours of the serving of the notice, the Nurse may visit the school and again take the child to the Cleansing Station as before.

The time is ripe for the Council to take this step forward in dealing with filth and vermin amongst the children.

It must not be forgotten that the first essential to health is a clean body.

Until public facilities are provided, there is no place where verminous persons can get a bath and have their clothing disinfected simultaneously. The case of the poor is sometimes a hard one. Without suitable utensils in which to boil their clothes, and sometimes without a sufficient supply of coals, some of them are helpless to keep their children and themselves clean and tidy, and will continue to be, unless some facilities are provided.

#### DEFECTIVE SPEECH.

The defect is generally a stammer.

In infants the deficiency is generally a defective articulation, sibilants often being faulty.

I have had some experience in the cure of stammering, and would recommend rules being sent to the parents, advising them of the best methods to cure the child of this defect. In the same way, advice to the teachers might do good.

#### DEFECTIVE VISION.

All children of six and over six, who are able to read, are tested.

It would be advisable in future to give the number of children with equal vision in each eye, the number with better vision in the right eye than the left, and the number with better vision in the left eye than the right.

If a standard were made for good vision, moderate vision, and bad vision, it would then be possible to give the percentages under these three headings, and if each school were treated separately one would be in a position to prove whether the lighting arrangements of the schools have some definite influence upon the eyesight.



A record of visual power ought to be kept of all children wearing glasses. The results obtained would be instructive.

During the year, 296 parents were notified of the children's condition, and advised to consult an oculist. Of these cases, 44 are now wearing glasses. Every encouragement to parents has been given to provide their children with glasses.

### EXTERNAL EYE DISEASES.

The defects are generally squints, inflammation of the eyes and lids, and opacities of the cornea.

During the year I have excluded several children from school for an acute inflammation of the eyes (muco-purulent ophthalmia). This is very infectious, and causes extreme pain on attempting the use of the eyes.

In some cases there has been a serious loss of school attendance through eye troubles, and generally the exciting cause has been the home conditions, dirty and foul smelling houses, and particularly want of fresh air.

### DEFECTIVE HEARING AND EAR DISEASES.

There is a close relation between throat and ear defects.

To infectious fevers and throat ailments, most of the running ears may be attributed.

A large number of these defects could be remedied if the cause, generally enlarged tonsils and adenoids, had prompt attention.

In other cases the home conditions are mainly the cause of the defects, and unless these conditions are remedied other treatment is useless.

### DEFECTIVE TEETH.

This represents gross decay. A probe and mirror examination would show further defects.

The teeth are very rarely cleaned; this neglect is more or less universal in some classes of children.

The injury to a child caused by the presence of decayed teeth is very great, and the consequences in the future, as regards health and usefulness, are becoming clearly recognised each year.

In order to prevent unsatisfactory conditions of the teeth, two factors are most important. Firstly, education and the co-operation of the teachers in bringing home to every child and every parent the conditions causing decay, and a course of practical personal hygiene, and, secondly, the provision of a Dental Clinic to be used for younger children. If attention were paid to these, there would not be so many cases where the defects are allowed to escape till they are past remedy.

### NOSE AND THROAT DISEASES.

This includes many complaints, of which the principal ones are Enlarged Diseased Tonsils, Adenoids, and Nasal Obstructions.

A large percentage of these children breathe through their mouths.

Tonsillar enlargements, however slight, are injurious to health. A routine examination shows that a certain percentage of them reduce in size without any interference; but, as a rule, they still further enlarge and develop irregularities, which are the homes of innumerable micro-organisms and the cause of permanent injury to the system.

With regard to Adenoids and Enlarged Tonsils, in time they give rise to a mental effect, noticeable as mental torpor or irritability. There is often great difficulty in persuading parents to have these growths removed, even after convincing them of the evil results on the child's health. Mouth breathing, defective chest expansion, deformity of chest, and deafness, often result.

During the year, I have come across two glaring cases of neglect to secure operative treatment. The parents' refusal to have the operation done, would constitute an offence under the Children's Act in neglecting to provide medical aid.

On November 14th, 1912, a case of considerable importance in connection with the inspection and treatment of school children, was heard. Mr. Justice Darling decided, "that where a child had suffered for some time from adenoids, which were causing mental dulness, impaired breathing and deafness, and that consequently the child was suffering injury to health, which could only be removed by a surgical operation for the removal of the defect," that the justices might properly convict. Not to provide proper medical aid for the child, so that the operation could be carried out is wilful neglect.

## MALNUTRITION.

There are not many children suffering from insufficiency in the amount of food provided.

Defective teeth contribute to some extent, unsuitable and badly cooked food are also a cause. There is a large amount of ignorance as to the best methods of cooking food, and their respective values in the way of nourishment.

Overcrowding and dirty homes, with insufficiency of sleep, are contributory causes.

Cookery classes in the schools are of great value to the future generation of mothers.

I have often observed the beneficial effects obtained by poor children, particularly those who are mal-nourished, anæmic or debilitated, by a few weeks holiday at the Crippled Children's Home at Elwick.

Tuition in a school conducted on open-air principles would be the remedy for many of the cases of Malnutrition.

## MENTAL CONDITIONS.

## MENTALLY DEFECTIVE.—

There is a special department in the Ward Jackson School where these children are taught. The accommodation is inadequate, and might with advantage be improved upon.

The instruction ought to be largely practical. The child should be taught a trade which would be helpful in after life.

The after care of mentally deficient children is very important, particularly from a moral point of view.

Careful records ought to be kept in all cases, not only during the school life, but also in after life, in order that questions concerning the welfare of the child might be consulted.

Dr. Swanwick supervises the mental condition, but so far no medical inspection of the children has taken place in this particular department.



## DEFORMITIES AND MALFORMATIONS.

These deformities include Curvatures of the Spine, Affections of the Chest, and Rickety Deformities.

Some of these cases could be further benefited by surgical operations.

A great amount of good has been done by the Crippled Children's Society, in providing temporary homes and surgical fittings.

## HEART AND CIRCULATORY DISEASES.

Most of the cases of Heart Disease were due to Rheumatism, and show valvular changes.

The first signal of mischief is the so-called growing pains, which are followed by breathlessness and other heart troubles.

Treatment consists in protecting the heart from overstrain, in supervising exercises and games, and in advising the parents of the child's condition.

## LUNG DISEASES.

Bronchitic conditions are often found, especially in rickety children, and sufferers from adenoids and enlarged tonsils.

The downward extension of the inflammatory conditions found in nasal, throat, and mouth affections, lead to bronchitis, whilst the primary causes, especially in rickety children, restrict the respiratory movements of the chest.

Unhygienic homes, and parental ignorance and neglect still further assist in the vicious circle, until the child is a chronic sufferer.

Many of these cases are found afterwards to be suffering from phthisis.

## PHTHISIS AND OTHER TUBERCULAR DISEASES.

All children showing active signs of Tuberculosis of the Lungs are excluded from school attendance.

There are a class of children who are anæmic and debilitated, and, though showing no active mischief in the lungs, turn out afterwards to be tubercular.

The best way of benefitting these children is to establish an open-air school. Until this is provided, we have no option but to exclude the child from school, in order that it may obtain fresh air and rest. But my experience is that many of these children do not spend this time out of doors, but stay at home and breathe air which is often very much more harmful than that obtained in the class room.

These cases require the closest supervision and frequent examinations.

### DISEASES OF THE NERVOUS SYSTEM.

There are some cases of Epilepsy, Infantile Paralysis and Chorea.

### DISEASES OF THE SKIN.

These include Impetigo-Contagiosa, Scabies, Ringworm, and Eczema.

Most of the cases of Impetigo are brought about by filth conditions, which generally occur in the home.

In order to exclude the possibility of contagion by the towels used at the school, it is necessary to have a plentiful supply, and have them changed daily.

There have been several cases of Scabies excluded from school.

### RINGWORM.

A large number of cases have been recorded. Many of the so-called cases of scurf are really Ringworm. There has been a large number of exclusions from school on this account. I average the number of exposures necessary for each case, if X-ray treatment is applied, to be four, and the time of cure five to six weeks. With other treatment, it average eight months, which necessitates a great loss of schooling, besides further increasing the number of cases by contact. During the year, I have microscopically re-examined the hair of nineteen cases certified to be cured of Ringworm, and applying for re-entrance to school. In twelve of these cases I had to further exclude, owing to Ringworm being still present.

No provision is made for these examinations, though they necessitate a large amount of time and labour.

## INFECTIOUS AND CONTAGIOUS DISEASES.

During the year there has been a severe epidemic of Scarlet Fever, which necessitated several visits to the schools.

I presented two special reports which supplied particulars, and drew attention to the principal symptoms and signs, by which this illness could be recognised in the earlier and later stages of the disease.

To do this work satisfactorily, when there are a large number of cases notified, requires a large amount of time spent at the schools.

It would be advisable to have the nasal and buccal discharges of each active and contact case of Diphtheria, examined microscopically, after cultivation, before allowing admittance into school. This is never done.

## SCHOOL MEDICAL INSPECTOR'S REPORT, BY Dr. WATERS.

The sanitary condition of the Ward Jackson, Avenue Road, Exchange, St. Joseph's Roman Catholic and Hart Lane Roman Catholic Council Schools and Seaton Carew Church School is satisfactory.

During 1913, 902 children were medically examined—475 boys and 427 girls.

274 boys and 280 girls came under the first inspection, and 201 boys and 197 girls the second.

The general health of the children may be described as good.

The most unsatisfactory result of the examination is the fact that no less than 78 children, or 8.6 per cent., bore no marks of vaccination.

These unprotected children are a source of danger to the general population of the town, and under the present easy way of evading the Vaccination Act, their number is likely to increase year by year.

Only 1.7 per cent. of the children examined had perfect sets of teeth.

There is a marked improvement in the cleanliness of the children, doubtless due to the efficient way in which the School Nurse performs her duty.

As usual, the teachers have cordially assisted the Inspecting Medical Officer in every way.

Seaton Carew,

J. M. WATERS.

1st January, 1914,



## REPORT OF SCHOOL NURSE.

For year ended 31st December, 1913.

							No. of Cases.
Verminous	...	...	...	...	...	...	183
Skin Diseases	...	...	...	...	...	...	158
Sore Heads	...	...	...	...	...	...	201
Sore Eyes	...	...	...	...	...	...	202
Ringworm	...	...	...	...	...	...	88
Sore Feet and Legs	...	...	...	...	...	...	64
Abscesses	...	...	...	...	...	...	64
Sore Ears	...	...	...	...	...	...	21
Adenoids and Tonsils	...	...	...	...	...	...	67
Other Ailments	...	...	...	...	...	...	295
							1,343
No. of Visits to Homes of Scholars...	...	...	...	...	...	...	3,591
„ „ Schools	...	...	...	...	...	...	509
Total number of children examined	...	...	...	...	...	...	3,338.
Number of children examined by Dr. Waters	...	...	...	...	...	...	902
„ „ „ „ „ Dr. Cockell	...	...	...	...	...	...	712
„ „ „ „ „ Dr. Pearson	...	...	...	...	...	...	1,155
„ „ „ „ „ Dr. McCullagh	...	...	...	...	...	...	569
							3,338

Number of children examined at different ages with sexes:—

Age.	Males.	Females.	Totals.
5	579	577	1,156
6	233	214	447
7	150	146	296
8	276	246	522
9	118	103	221
10	80	70	150
11	58	48	106
12	56	62	118
13	120	147	267
14	49	6	55
	1,719	1,619	3,338

The following statistics show in a condensed form, the percentages of defects and other conditions noted:—

Defects.	Dr. Waters.	Dr. Cockell.	Dr. Pearson.	Dr. McCullagh	Average.
Clothing and Footwear:—					
Bad Clothing ... ..	7.8	6.7	17.5	2.3	8.57
Bad Boots ... ..	7.0	6.9	24.0	3.0	10.22
Barefooted ... ..	2.8	.9	13.0	.2	4.22
Uncleanliness:—					
Dirty Heads ... ..	3.2	5.7	15.5	3.8	7.05
Dirty Bodies ... ..	1.9	6.7	17.1	5.7	7.85
Defective Speech ... ..	2.6	.6	.7	.3	1.05
Defective Vision ... ..	16.3	6.0	16.0	6.4	11.17
External Eye Diseases ... ..	3.1	3.7	5.5	1.1	3.35
Defective Hearing and Ear Diseases ... ..	.7	4.2	2.1	1.1	2.02
Defective Teeth ... ..	12.6	6.5	24.8	7.8	12.92
Perfect Sets of Teeth ... ..	1.7	—	—	—	.425
Nose and Throat Diseases ... ..	3.7	2.7	5.6	6.7	4.67
Nutrition:—					
Good ... ..	48.0	52.0	25.6	49.1	43.6
Normal ... ..	35.4	47.5	55.9	49.1	46.9
Below Normal ... ..	12.2	.5	17.9	1.0	7.9
Bad ... ..	4.4	—	.6	.8	1.6
Mental Condition:—					
Bright ... ..	72.5	69.7	81.4	99.0	80.7
Fair ... ..	22.5	29.7	11.6	—	15.9

## STATISTICS—Continued.

Defects.	Dr. Waters.	Dr Cockell.	Dr. Pearson.	Dr. McCullagh.	Average.
Mental Condition:—					
Dull ... ..	5.0	.6	7.0	1.0	3.4
Mentally Defective ... ..	—	—	—	—	—
Imbecile ... ..	—	—	—	—	—
Deformities and Malformations	3.0	.8	1.3	1.2	1.57
Heart and Circulation Diseases	3.0	4.3	1.1	.5	2.22
Skin Diseases ... ..	3.4	.7	4.5	.7	2.32
Ringworm ... ..	.1	—	—	.1	.05
Lung Diseases ... ..	.1	3.4	2.6	.6	1.67
Diseases of Nervous System ...	.8	.4	1.3	—	.62
Phthisis ... ..	.4	.4	.1	—	.225
Other Tubercular Diseases ...	—	.6	1.9	.9	.85
Rickets ... ..	.1	.2	2.4	—	.67
Infectious and Contagious Diseases ... ..	—	.1	—	—	.025
Other Diseases or Defects ...	.3	5.5	1.5	—	1.82
Parents or Friends Present ...	41.2	72.4	51.6	49.5	53.67
Previous Illnesses of Children include:—					
Measles ... ..	25.4	7.0	47.6	5.1	21.27
Whooping Cough ... ..	14.0	2.6	19.7	2.1	9.6
Scarlet Fever ... ..	4.5	3.3	4.8	5.6	4.55
Diphtheria ... ..	.9	.8	18.4	1.1	5.3
Chicken Pox ... ..	6.1	—	8.7	1.0	3.95
Other Illnesses ... ..	14.9	10.0	17.4	4.7	11.75



## STATISTICS—Continued.

Defects.	Dr. Waters.	Dr. Cockell	Dr. Pearson.	Dr McOullagh.	Average
No Vaccination Marks ... ..	10.2	9.8	4.3	3.7	7.0
1 Vaccination Mark ... ..	11.6	9.10	4.7	9.5	8.9
2 Vaccination Marks ... ..	20.3	16.11	15.8	26.7	19.9
3 Vaccination Marks ... ..	10.7	5.6	23.7	24.0	16.0
4 Vaccination Marks ... ..	47.0	57.5	51.2	36.1	48.2

The following tables give the average weights and heights of children measured in 1913:—

## GIRLS.

Age.	Weight in Lbs.	Weight in Kilos.	Height in Inches.	Height in Cms.
4 to 5	35.12	16.5	37.10	98.1
5 to 6	39.0	17.6	41.9	104.15
6 to 7	44.2	19.7	42.8	112.2
7 to 8	45.7	20.15	43.45	112.9
8 to 9	46.4	21.3	45.6	113.7
12 to 13	72.5	33.4	54.8	138.2
13 to 14	79.9	35.7	57.1	141.4

## BOYS.

Age.	Weight in Lbs.	Weight in Kilos.	Height in Inches.	Height in Cms.
4 to 5	36.7	17.1	38.6	99.4
5 to 6	39.8	18.4	42.1	105.3
6 to 7	45.1	20.2	43.9	112.4
7 to 8	45.9	21.1	43.15	112.85
8 to 9	48.2	22.15	45.15	117.75
12 to 13	73.4	34.15	56.75	141.35
13 to 14	81.6	38.2	57.25	144.87

## MEMO.

Population of the County Borough, 1st July, 1914

(estimated) ... .. 65,000

Death Rate for 1913, per 1,000 persons living ... 15.98

Birth Rate ... .. 29.57

Still Births (102) ... .. 1.56

Death Rate for 1913, from principal Epidemic  
Diseases, per 1,000 persons living—

19. Measles ... .. .29

46. Zymotic Diarrhoea ... .. .70

8. Whooping Cough ... .. .12

10. Diphtheria ... .. .15

0. Erysipelas ... .. —

4. Scarlet Fever ... .. .06

0. Puerperal Fever ... .. —

71. Phthisis ... .. 1.09

58. Other Tubercular Diseases ... .. .89

7. Enteric Fever ... .. .10

---

206. Respiratory Diseases ... .. 3.16

55. Cancer ... .. .84

Deaths in 1913 of Infants under the age of 1 year,  
per 1,000 births ... .. 133